

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)	
Bryon Williams)	CAC/MSOS
Myfanwy Bowman)	
Doug Buhr)	City of Winnipeg
Peter Miller)	TREE
Tamara McCaffrey)	MIPUG
Patrick Bowman)	
Andrew McLaren)	
Jurgen Feldschmid	(np)) CCEP
Michael Anderson	(np)) MKO

	TABLE OF CONTENTS	
		Page No.
1		
2		
3	List of Exhibits	1814
4	List of Undertakings	1815
5		
6	MIPUG PANEL	
7	PATRICK BOWMAN, Sworn	
8	ANDREW MCLAREN, Sworn	
9		
10	Examination-in-Chief by Ms. Tamara McCaffrey	1817
11	Cross-Examination by Dr. Peter Miller	1904
12	Cross-Examination by Mr. Byron Williams	1918
13	Cross-Examination by Ms. Patti Ramage	2017
14	Cross-Examination by Mr. Bob Peters	2060
15	Re-Direct-Examination by Ms. Tamara McCaffrey	2108
16		
17		
18	Certificate of Transcript	2112
19		
20		
21		
22		
23		
24		
25		

	LIST OF EXHIBITS		
	Number	Description	Page No.
1			
2			
3	MH-22:	List of short-term opportunity	
4		sales	1916
5	MH-23:	Response to Undertaking 20	1916
6	MH-24:	Undertaking number 21.	1917
7	MH-25:	Undertaking number 22.	1917
8	CAC/MSOS-7:	4 pages of data	1973
9	CAC/MSOS-8:	Response to CAC/MSOS	
10		Undertaking reference transcript	
11		pages 1794 to 95.	2014
12	MH-26:	Depiction of the MIPUG	
13		recommended approach to export	
14		revenues	2043
15	MH-27:	Undertaking 18	2106
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

		LIST OF UNDERTAKINGS	
	No.	Description	Page
1			
2			
3	23	MIPUG to Confirm the percentage increase	
4		in the load of energy intensive	
5		industry in Manitoba in the last	
6		five (5) years	2028
7	24	MIPUG to Confirm the current obligation	
8		of Quebec Hydro to its intensive load	
9		customers	2029
10	25	Manitoba Hydro to clarify for the Board	
11		the definition of 'intensive section' and	
12		provide background numbers to quantify	
13		the 170 percent increase.	2031
14	26	Turning to demand charges, as well as the	
15		energy charges, what proportion of total	
16		billing for each class relates to demand	
17		charges and MIPUG to provide that ratio.	2104
18			
19			
20			
21			
22			
23			
24			
25			

1 --- Upon commencing at 9:38 a.m.

2

3 THE CHAIRPERSON: Good morning everyone.
4 Ms. McCaffrey, perhaps you could introduce your witnesses
5 first. Then we'll have Mr. Barron swear them in and
6 we'll get underway.

7 MS. TAMARA MCCAFFREY: Thank you very
8 much, Mr. Chairperson.

9 With me today are two (2) consultants from
10 Intergroup Consultants who have assisted me and MIPUG in
11 this intervention.

12 Patrick Bowman, he has appeared as an
13 expert witness before this tribunal and others in the
14 country before.

15 And with him is Andrew McLaren who has
16 been Intergroup for-- since about 2000 and has a great
17 deal of consulting experience in this area.

18 I'm going to -- after they're sworn I'm
19 going to give each of these gentlemen an opportunity to
20 highlight their qualifications that relate to the matters
21 in these proceedings, following which I will be seeking
22 to have them qualified as experts with respect to the
23 matters before you.

24 THE CHAIRPERSON: Very good, Ms.
25 McCaffrey.

1 (BRIEF PAUSE)

2

3 MIPUG PANEL:

4 PATRICK BOWMAN, Sworn

5 ANDREW MCLAREN, Sworn

6

7 THE CHAIRPERSON: Thank you, Mr. Barron.

8 Ms. McCaffrey ...?

9 MS. TAMARA MCCAFFREY: Thank you.

10

11 EXAMINATION-IN-CHIEF BY MS. MCCAFFREY:

12 MS. TAMARA MCCAFFREY: Mr. Bowman, you've
13 testified before this Public Utility Board before on at
14 least two (2) prior occasions.

15 But I would like you -- just for the sake
16 of those that weren't here before and also for the record
17 to highlight your experience as they relate to electrical
18 utilities, in the matters in issue in this proceeding,
19 with particular reference to cost of service matters and
20 rate design.

21 MR. PATRICK BOWMAN: Yes, thank you.

22 Good morning Mr. Chairman, Members of the Panel.

23 I've appeared before this Panel and others
24 in Canada as an expert on matters of utility regulation
25 on two (2) separate occasions. I've been before this

1 Board in the 2002 status update proceeding as well as the
2 2004 general rate application.

3 I've also appeared before the Yukon Public
4 Utilities Board as an expert on behalf of Yukon Energy
5 Corporation as a witness for the company, in respect of
6 an application dealing primarily with revenue requirement
7 and rate design matters.

8 I've appeared before the Northwest
9 Territories Public Utilities Board on both matters of
10 cost of service and rate design and also a special
11 hearing dealing with system planning and capacity
12 requirements, system reliability, planning criteria.

13 I've been before the Newfoundland Public
14 Utilities Tribunal working for industrial customers in
15 Newfoundland in respect to matters of revenue
16 requirement, cost of service and rate design.

17 And I've also submitted materials to the
18 Nunavut Regulator in Nunavut. That Commission doesn't
19 qualify experts but we've prepared submissions for that
20 tribunal on behalf of smaller, commercial customers.

21 On top of appearing as an expert for
22 utilities and Intervenor groups, I've also done work on
23 utility matters for -- for government bodies in some
24 cases in regards to utility regulation policy,
25 particularly with regard to rate subsidies in -- in the

1 north, in Yukon and Northwest Territories. And -- and
2 also in regards to utility franchise matters for -- for
3 municipal governments.

4 MS. TAMARA MCCAFFREY: Thank you, Mr.
5 Bowman. And for reference Mr. Bowman's CV is attached as
6 Attachment D to the MIPUG evidence -- pre-filed evidence,
7 which has already been marked as exhibit -- MIPUG Exhibit
8 1 in these proceedings.

9 There's also some information provided in
10 response to CAC/MSOS/MIPUG IR-1 as well which sets out
11 Mr. Bowman's experience in more of a table form as well
12 at Attachment A.

13 Now, I'm going to turn to Mr. Andrew
14 McLaren. Mr. McLaren, this is your first appearance
15 before this tribunal; is that correct, sir?

16 MR. ANDREW MCLAREN: Yes, that's correct.

17 MS. TAMARA MCCAFFREY: Can you please go
18 through your qualifications for the Board, specifically
19 in reference to your experience with cost of service rate
20 design matters in a -- in the context of a regulated
21 utility?

22 MR. ANDREW MCLAREN: Certainly. Good
23 morning, Mr. Chairman and members of the Board. My name
24 is Andrew McLaren. I hold a Masters Degree in Natural
25 Resources Management with course work that included

1 natural resource economics as well as applied systems
2 modelling techniques.

3 Since 2000 I have worked for Intergroup
4 Consultants Limited in Winnipeg, primarily in the field
5 of regulatory consulting related to electric utilities.
6 During this period I have worked for clients including
7 utilities, commercial and industrial customers as well as
8 governments.

9 For the Northwest Territories Power
10 Corporation I have worked closely since 2000 with senior
11 management and the financial planning group there on a
12 variety of regulatory matters. These include research
13 and analysis support during the Corporation's 2001/02 and
14 2002/03 general rate application.

15 This work included researching and
16 preparing regulatory filing materials related to cost of
17 service methodologies used by regulated utilities in
18 Canada as well as preparation, review, and analysis
19 related to the Corporation's own cost of service study
20 filed as part of the Phase II general rate application.

21 Because of the requirement to perform a
22 separate cost of service study for each community that it
23 serves NTPC prepares twenty-six (26) individual cost of
24 service studies so that the total cost of service
25 material filed in any proceeding runs for several

1 hundreds of pages.

2 I have also at other times been
3 responsible for running modelling scenarios related to
4 the cost of service study impacts of certain changes to
5 the Corporation's cost of service methodology as well as
6 the possible potential for cost of service impacts of
7 certain changes to the Corporation's expenses or load
8 characteristics.

9 For the 2001/02 and '02/03 Phase II GRA I
10 had the primary responsibility for developing the rate
11 proposals for the application and responding to
12 Interrogatories from the Northwest Territories Public
13 Utilities Board as well as other Intervenors related to
14 those topics.

15 I'm currently involved in the preparation
16 of the Corporation's next general rate application
17 including the development of the load forecast and
18 various components of revenue requirement for that
19 application.

20 I have also prepared analysis and
21 applications on other regulatory matters for NTPC
22 including being the Corporation's primary resource on
23 rate stabilization rider applications, a topic which is
24 particularly relevant to some of the issues discussed in
25 our evidence and elsewhere in this proceeding, as well as

1 characteristics of different customer classes. I
2 prepared a similar modelling tool for the government of
3 the Northwest Territories to evaluate ongoing costs and
4 potential impacts of possible changes to the territorial
5 power support program which is also a government-funded
6 electricity subsidy program.

7 For the Yukon Energy Corporation, I
8 reviewed and prepared load forecast information and
9 analysis used in the Corporation's 2005 required revenues
10 and related matters application.

11 For smaller commercial customers in
12 Nunavut I prepared analysis and regulatory filings
13 related to the review of a recent rate application as
14 well as other rate proposals.

15 And, finally, for industrial customers in
16 Newfoundland and Labrador I've assisted in the
17 preparation of regulatory filings in the 2001 and 2003
18 general rate applications, including review of the
19 Utility's cost of service studies and the rate
20 stabilization plan.

21 THE CHAIRPERSON: Thank you.

22 MS. TAMARA MCCAFFREY: Mr. Chairperson,
23 subject to any questions from the Board or -- or others,
24 I'm seeking to have these gentlemen qualified as experts
25 before you with respect to the matters in this

1 proceeding.

2 THE CHAIRPERSON: Thank you.

3 Ms. Ramage or any of the Intervenors, do
4 you have a view on this?

5 MS. PATTI RAMAGE: Mr. Chair, certainly
6 Mr. Bowman has been qualified as an expert in the past
7 and -- and we have no concerns there.

8 I have a small concern whether Mr.
9 McLaren's experience is sufficient to qualify him as an
10 expert but, at the same time, don't want to in any way
11 impede the delivery of -- of MIPUG's testimony. So I --
12 I don't want to place any objection on the record.

13 MS. TAMARA MCCAFFREY: Does My Friend
14 have any questions perhaps to clarify some of the things
15 Mr. McLaren has outlined already? In the past six (6)
16 years his experience was cost of service rate design in
17 the context of a hydro-electric utility. Perhaps there's
18 something that Mr. McLaren can clarify for you that might
19 assuage your concerns; other than the fact that he hasn't
20 testified before, but that's personal criteria.

21 MS. PATTI RAMAGE: I think what he said
22 has -- is on the record and it's -- it was simply the six
23 (6) years and -- and being an assistant in -- in
24 proceedings as opposed to -- to taking responsibility.

25 But, as I say, I don't want to impeded

1 MIPUG in -- in any way.

2 THE CHAIRPERSON: Thank you, Ms. Ramage.
3 Any of the other Intervenors have a
4 position? Ms. Bowman...?

5 MS. MYFANWY BOWMAN: Good morning, Mr.
6 Chairman, Members of the Panel.

7 For CAC/MSOS, we're actually in a similar
8 position to Hydro. We have no objection to Mr. Bowman's
9 qualifications. With respect to Mr. McLaren, we're
10 simply not going to take a position.

11 THE CHAIRPERSON: Any others?

12 MR. DOUG BUHR: For the City of
13 Winnipeg --

14 THE CHAIRPERSON: Mr. Buhr...?

15 MR. DOUG BUHR: Sorry, Mr. Chairman. We
16 take no position, sir.

17 THE CHAIRPERSON: Mr. Peters, do you have
18 any comment?

19 MR. BOB PETERS: I just want parties to
20 understand that I -- more particularly the Board to
21 understand that witnesses come in two (2) flavours.

22 One is they are fact witnesses, where they
23 can testify as to facts that they know or learn or
24 develop through the evidence. And the other type of
25 witness would be one that can give an opinion.

1 And to give an opinion before the Tribunal
2 there is a procedure that we -- we have that the
3 witnesses must be considered to be expert witnesses. And
4 if they are considered to be expert witnesses by the
5 Tribunal, then they will provide the Board with opinions
6 where asked, and they can be challenged on their opinions
7 and have to state the basis for them.

8 When the Board hears from a variety of
9 expert witnesses, the Board also has the task of having
10 to weigh the evidence that it hears and decide which, if
11 any, of the witnesses' evidence is more cogent than the
12 other.

13 So with that background, I think we've
14 heard from the witnesses themselves, we have no formal
15 objections, we have some abstentions on the record. And
16 it will now be for the Board to accept the witnesses as
17 experts before the Tribunal for the purposes of this
18 hearing and to determine what weight to attach, or to
19 make some other finding.

20 THE CHAIRPERSON: Mr. Mayer...?

21 MR. ROBERT MAYER: Ms, McCaffrey, in
22 exactly what do you wish to have the gentleman qualified
23 as an expert?

24 MS. TAMARA MCCAFFREY: The matters before
25 this proceeding encompass cost of service primarily and -

1 - and so certainly that would be one (1) area. They have
2 also moved over somewhat into rate design issues.

3 Mr. McLaren's background encompasses both
4 those areas extensively in the context of hydroelectric
5 utilities over -- over some six (6) years of -- of
6 experience working at InterGroup and for various
7 utilities or -- and governments.

8 And, accordingly, I am -- that -- it does
9 meet the criteria for expert evidence from the Supreme
10 Court of Canada in Lavelly (phonetic), Mohan (phonetic)
11 and other cases. And, accordingly, I'm seeking to have
12 them qualified as experts with respect to those areas.

13 The reason why I worded it in a general
14 way is because we're -- in consultation with Counsel for
15 the Board, we're in a cost of service hearing but we're
16 looking at some broader issues as well. But these are
17 the types of issues that consultants that work in the
18 regulatory world deal with on a day-to-day basis.

19 And -- and those are the areas that I'm --
20 I'm seeking to have them qualified in, Mr. Mayer.

21 MR. ROBERT MAYER: The only reason I
22 question that, Ms. McCaffrey, I recognize that the
23 argument that you've never appeared before a tribunal
24 before isn't really good, I'd have a hard time getting
25 into a courtroom if that was my problem. However,

1 generally speaking, when you qualify a witness, you
2 qualify and restrict the area of expertise.

3 Cost of service and rate design, would you
4 comfortable with that?

5 MS. TAMARA MCCAFFREY: Certainly.

6 THE CHAIRPERSON: Okay. We'll accept the
7 witnesses and we'll hear the evidence and we will give
8 them the weight that we determine so to do.

9 MS. TAMARA MCCAFFREY: Thank you.

10 THE CHAIRPERSON: Ms. McCaffrey...?

11

12 CONTINUED BY MS. TAMARA MCCAFFREY:

13 MS. TAMARA MCCAFFREY: What I'd like to
14 do now is have each of these gentlemen explain to the
15 Board what their role was, in terms of this intervention
16 and reviewing the evidence.

17 And we'll just touch on that briefly and
18 then go right into the specific evidence itself and give
19 them an opportunity to comment, both on their pre-filed
20 evidence as well as other evidence in this proceeding.

21 Mr. Bowman, can you describe your role in
22 terms of this intervention for the Board, sir?

23 MR. PATRICK BOWMAN: Yes. The evidence
24 before you was prepared under my direction and overall
25 responsibility for the preparation of the evidence and

1 for development of the specific proposals before the
2 Board.

3 In the evidence, I'll be speaking
4 generally to the evidence and primarily the matters
5 contained in sections 2, 3, and 4, which are the core
6 areas with regard to the context for the hearing, the
7 problems that give rise to the hearing and the proposals
8 -- the assessment of the proposals put forward by Hydro
9 and the matters we've put forward as proposals in our
10 evidence.

11 MS. TAMARA MCCAFFREY: Thank you sir.
12 Mr. McLaren, can you describe for the Board your role in
13 the preparation of this evidence, sir?

14 MR. ANDREW MCLAREN: Yes, I was primarily
15 related to the analysis of the impacts of the very
16 technical changes to the cost of service methodology
17 proposed by Manitoba Hydro, as well as research into rate
18 design matters, to the extent that they are applicable to
19 the topics at hand.

20 And I should point out that we have two
21 (2) other members from our firm in the gallery who
22 assisted me with that. And that would be Ms. Jing Jang
23 (phonetic) and Ms. Mona Poet-Smith who may be familiar to
24 Members of this Panel from other venues.

25 MS. TAMARA MCCAFFREY: Thank you.

1 Gentlemen, Mr. Bowman, do you adopt the evidence prepared
2 in this proceeding, sir?

3 MR. PATRICK BOWMAN: Yes.

4 MS. TAMARA MCCAFFREY: And Mr. McLaren
5 with respect to the evidence that you prepared, you
6 indicated dealing with the attachments, do you adopt the
7 evidence to the extent that you've prepared it, sir?

8 MR. ANDREW MCLAREN: I do.

9 MS. TAMARA MCCAFFREY: Thank you. With
10 that then, let's go through it.

11 Mr. Bowman, what did you look at when you
12 were -- all right, by way of housekeeping then, before we
13 get into the heart of the evidence there are a couple of
14 minor corrections, as I understand, to the evidence.

15 Go ahead Mr. Bowman.

16 MR. PATRICK BOWMAN: Thank you. Actually
17 corrections as well as some clarifications. There are
18 none in the evidence itself, but they relate to the
19 interrogatories prepared on the evidence.

20 And just to go through them quickly there
21 was a couple of words that were inadvertently omitted
22 from IR CAC/MSOS/MIPUG IR-7, which was also submitted in
23 Mr. William's book of documents.

24 And there was a sentence that says:

25 "The export class fails to capture

1 sufficiently the quantum of costs that
2 Hydro routinely --"

3 And the words, pays to secure, were
4 missing. So it reads:

5 "routinely the full amount to secure
6 export revenues."

7 Which is not even a complete sentence.

8 But the words, pays to secure, were missing after the
9 word routinely. And that was in CAC/MSOS/MIPUG IR 7-B.

10 The other correction was in regards to
11 Manitoba Hydro IR-2 MIPUG 11. And in that IR the --
12 there's a series of bullets and in the first bullet it
13 says -- it's asking about the establishment of a reserve
14 fund requiring a general rate increase.

15 And the response it says:

16 "It is confirmed in general, however --
17 "

18 And in the first line it says:

19 "In the short run such a fund may be
20 able to be established."

21 The word should be,

22 "without rate increases to customers in
23 the event Hydro's earnings continue to
24 exceed what is determined to be
25 reasonable net income levels such as

1 occurred in 2005/06."

2 The word that's currently there is "with".
3 It should read "without".

4 I should also note that Consumers
5 Association question to us number 3(a) asked us to
6 identify any regulatory precedent in support of the
7 export revenue threshold concept and the response is:

8 "We are not aware of any specific
9 regulatory precedent for this
10 treatment."

11 Since preparing this response we were
12 reviewing again the NERA survey and note that there is
13 one (1) specific regulatory precedent identified in the
14 NERA survey of other utilities similar to Manitoba Hydro
15 and that's Idaho Power.

16 And the Idaho Power reference in the NERA
17 survey notes that in their case all opportunity sales are
18 credited to customers on the basis of kilowatt hours
19 similar to the system in Manitoba that we currently have.
20 While all long-term firm sales greater than one (1) year
21 are treated as a class so that they cover their embedded
22 costs but the excess is not credited back to customers.

23 So in -- in essence as a -- as a precedent
24 for a threshold, based on review of the NERA survey,
25 there would be that one that we wanted to bring to the

1 Board's attention.

2 And just as a final comment for
3 clarification, in MH/MIPUG-5, Manitoba Hydro asked us to
4 file some documents from other regulators in regards to
5 rate stabilization plans. One of those documents is from
6 Newfoundland from a hearing that was -- occurred in
7 Newfoundland in their 2001/2002 GRA.

8 There's some reference in that decision to
9 a Mr. Bowman and I just would note that is -- that is not
10 me. That is a fellow named Douglas Bowman who was
11 appearing on behalf of the consumers group at that time.
12 I participated in the subsequent GRA as an expert.

13 MS. TAMARA MCCAFFREY: Okay. Thank you
14 very much. Housekeeping matters aside, let's jump right
15 into it then.

16 Mr. Bowman, can you tell the Board what
17 you looked at in the context of this hearing, sir?

18 MR. PATRICK BOWMAN: Yes, in preparing
19 the evidence we were retained by the MIPUG members to
20 review Hydro's filing and within a context of industrial
21 customer concerns, which we've set out in some detail at
22 Section 1.2 of our evidence.

23 And just quickly those are concerns
24 regards to stability and predictability of rates, need
25 for a strong regulatory oversight, that rates should

1 reflect underlying costs, other matters dealt with in the
2 bullets in that section.

3 Within that context we were asked to
4 review Manitoba Hydro's filing to assess the filing in
5 light of normal regulatory principles and procedures used
6 for Canadian utilities and -- and to provide -- to
7 provide comments as to the extent that the problems
8 highlighted by Hydro and the extent to which the
9 proposals, in fact, addressed the problem.

10 When we take on assignments such as these,
11 typical to this type of assignment is a requirement to
12 consider the -- the history of the jurisdiction, it's --
13 it's regulatory framework, characteristics of the utility
14 and how it plans, designs and operates its system and the
15 type of loads it serves and the policy framework for
16 regulation.

17 So those are -- there are a fair number of
18 other things that we reviewed in that context to ensure a
19 full understanding of -- of Manitoba Hydro, both the
20 framework in which it builds and operates its system and
21 the framework from which its regulated; that's the same
22 as we -- we do in Newfoundland or Yukon and the same that
23 we do in -- we've done in this hearing.

24 MS. TAMARA MCCAFFREY: Mr. Bowman, can
25 you summarize the application and the issues before the

1 Board as you see them, sir?

2 MR. PATRICK BOWMAN: Yes. In reviewing
3 Hydro's filing we note that the -- the application is
4 here before the Board pursuant to a directive of this
5 Board in regards to cost of service matters.

6 The -- the basic case being put forward by
7 Hydro is that there are now too much export revenues to
8 retain accepted cost of service methods and that although
9 it's not specifically addressed in the cost of service
10 materials, there is also a basic case being put forward
11 by Hydro that continues to cite increasing risks and
12 insufficient level of reserves and, finally, there are
13 various other cost of service methods being put forward
14 by Hydro that are intended as improvements on the cost of
15 service study.

16 MS. TAMARA MCCAFFREY: Mr. Bowman, in
17 your professional experience over the -- the years that
18 you've worked in this area if you're faced with problems
19 of this type that are being put forwards by Hydro, what
20 would you see as a sensible starting point to approach
21 the problem?

22 MR. PATRICK BOWMAN: Well, we would say,
23 to start, it's -- it's not an easy problem. The -- the
24 issues Hydro is dealing are -- are, in some cases,
25 unique. They're, in some cases, different than what was

1 -- what was here before.

2 But if the basic issue being put to us is
3 a utility who has -- who asserts that they have windfall
4 revenues being well in excess of the costs to -- to
5 secure those revenues, we would say that a credible
6 starting point would be looking at a way to -- to
7 consider ways to use those revenues that are consistent
8 with normal regulatory principles, first principals, and
9 to -- and consistent with the rules in that jurisdiction.

10 In the case of -- the case being put
11 forward by Hydro, where the windfall revenues are
12 occurring at a time that the Utility is also indicating
13 that they have insufficient reserves and high levels of
14 debt and the regulators noting concerns over the high
15 levels of debt, it would seem that one would want to
16 think seriously about linking the two -- the two (2)
17 facts.

18 This particularly is -- this opportunity
19 is particularly focussed in a case where the -- the high
20 levels of debt or -- or low reserves are something that
21 would be a matter of concern with regard to rate
22 stability. And the export revenues themselves are cited
23 as a possible reason or a contributing factor of that
24 rate instability. There is a substantial rate stability
25 link between the two (2) issues.

1 In regards to the general problem that's
2 being put forward in -- on matters of price signals, we
3 would say it's an entirely different issue. It's one
4 that is -- price signals are inherently a rate design
5 topic, and one would want to look to a different suite of
6 tools to address price signal issues.

7 MS. TAMARA MCCAFFREY: You're saying "a
8 different suite of tools," you mean different than cost
9 of service.

10 Is that right, sir?

11 MR. PATRICK BOWMAN: Yes, that's correct.
12 Cost of service is not inherently a pricing -- a price
13 signal tool, it's a -- it's a cost allocation tool. Out
14 of that, one moves into a rate design step, which is
15 inherently where pricing signals are developed.

16 MS. TAMARA MCCAFFREY: All right. We're
17 -- we're going to talk now a little bit about the
18 proposals put forward by Manitoba Hydro.

19 Can you summarize them as you see them for
20 the Board, sir.

21 MR. PATRICK BOWMAN: Yes. In our
22 evidence we've set this out in some detail at -- at
23 Section -- Section 2. But at -- at a high level, the
24 proposals put forward by Manitoba Hydro are -- appear to
25 be fundamentally based on the Utility perceiving that it

1 has a problem with the level of export revenues and the
2 consistent -- existing treatment.

3 In our view, they've taken a -- an overly
4 narrow consideration of -- of alternatives to deal with
5 the problem. That -- that narrow interpretation is that
6 there is solely a solution -- a solution needs to solely
7 be found in the cost of service study, not in other --
8 other matters related to the Utility.

9 And at the end of the day, ultimately the
10 solution effectively comes down to not crediting a good
11 portion of export revenues to the generation and
12 transmission functions but instead to the distribution
13 function.

14 MS. TAMARA MCCAFFREY: Well, with respect
15 to the cost of service, we've heard a lot of descriptions
16 of what it is. So rather than going through the -- the
17 purposes of cost of service, do you have anything to add
18 to the evidence you've already heard?

19 MR. PATRICK BOWMAN: Not particularly. I
20 think Manitoba Hydro and -- and Mr. Harper have done a
21 good job of describing what a cost of service study is
22 and what it's for, and the record is -- is quite clear
23 and solid on that matter.

24 I would just emphasize that it's a -- it
25 is a technical tool, it is a professional practice area,

1 that there are -- there are people who do this for -- for
2 a living, and that -- that the cost of service methods
3 would be based on -- on professional judgment, informed
4 by characteristics relating to the system.

5 There's no -- there's no magic, it's --
6 it's just an -- a tool of assessment.

7 MS. TAMARA MCCAFFREY: So you talk about
8 professional judgment, there's been lots of discussion of
9 Bonbright principles and judgment.

10 Is that what you're talking about here,
11 sir?

12 MR. PATRICK BOWMAN: Well, not
13 particularly. The -- the references to Bonbright, in
14 some cases, are referencing judgment in -- in a different
15 way.

16 The -- Bonbright's a seminal textbook in
17 regards to utility regulation. It's about four hundred
18 (400) pages of dealing with everything from revenue
19 requirements through to rate design.

20 In that four hundred (400) pages there's
21 about one (1) fourteen (14) page section that deals with
22 cost of service and most of it is effectively just saying
23 this is one (1) way to make rates reflect costs.

24 It has no guidance in terms of how to do a
25 cost of service study. In terms of this Hearing, it's

1 not the handbook or the textbook one would look to.

2 In regards to practice and cost of service
3 studies, there are -- there are people who have sought to
4 put forward standards and handbooks. The primary one
5 that's usually referenced is the National Association of
6 Regulatory Utility Commissioners in the United States who
7 produced an electric utility cost allocation manual in
8 1973, updated in 1992.

9 If one was looking to do an electric cost
10 of service study and wanted some first principles about
11 doing that, that's the kind of place one would look.
12 Bonbright's section on cost of service doesn't
13 particularly deal with electric utilities, at all.

14 MS. TAMARA MCCAFFREY: So there is some
15 source, some secondary sources as a guide, but that's not
16 to say that there is not judgment involved, in terms of
17 cost of service, is that right sir?

18 MR. PATRICK BOWMAN: I'm not saying that
19 at all. There is certainly a fair bit of professional
20 judgment in various parts of preparing a cost of service
21 study.

22 It's not unguided judgment -- that --
23 professionals preparing a cost of service study aren't
24 seeking to make the decisions that they like or the
25 outcomes that they like. They should be able to build

1 the link from the system -- how the system is planned and
2 operated, the reason costs are incurred, through to why
3 that cost allocation is reasonable and appropriate, on
4 their path.

5 There may be room for judgment in
6 differences as to why various parts of the system are
7 built or what is driving costs. But the point is that
8 the judgment should be informed and based on that link
9 between the system and why its built and operated and the
10 ultimate cost allocation.

11 And in that regard, there is -- although
12 there is no CIC handbook or equivalent to cost of
13 service, there is some substantial sources of guidance.
14 Certainly the first thing that we would look to in any
15 case, is the long established practice in the
16 jurisdiction.

17 Lots of time and energy and more goes into
18 the debates that have occurred in the past to get where
19 we are today and some due regard should be given to those
20 debates. Also to the first principles for cost
21 allocation that one would see in something like a NARUC
22 handbook.

23 And the third would be precedent from
24 other jurisdictions who've taken the time to consider
25 similar matters.

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

(BRIEF PAUSE)

MS. TAMARA MCCAFFREY: So we're talking about two (2) different types of judgment here. Judgment within the context of the science and judgment within the context of an art, is that --

MR. PATRICK BOWMAN: That's a phrase that is sometimes used before regulators such as this that rate design is an artistic process, it's inherently an art. There's no right answer.

But, there's a lot of considerations that go into it and a lot of room for a certain type of judgment. By comparison cost of services is an analytical tool and people will say it's not an exact science but it's meant to be an analytical tool or a science.

And so in regards to the Bonbright quotes coming from later in the book about judgment and balance, much of that has to do with the ultimate rate design process and the balancing that goes into the rates that are ultimately charged.

MS. TAMARA MCCAFFREY: In the cost of service we know already that there's six (6) main tasks generally described, in terms of preparing one (1), and we've gone through that already.

1 What I'd like to do is give you an
2 opportunity to comment with respect to those main tasks
3 in terms of whether the areas where a significant amount
4 of judgment would come in.

5 And particularly, I'm interested in the
6 functionalization component of preparing a cost of
7 service, which is one (1) of the key issues before the
8 tribunal in this proceeding.

9 MR. PATRICK BOWMAN: Yes. The matter of
10 judgment in the cost of service study varies depending on
11 the step you're dealing with and how much judgment is
12 involved.

13 This cost of service study typically has
14 two (2) main inputs one of which is your revenue
15 requirement which by the time one (1) gets to a cost of
16 service study is relatively firm. There's not a lot of
17 judgment about what the revenue requirement is going to
18 be. You're trying to -- to collect in terms of cost of
19 service being typically the second phase of an analysis
20 of a -- of a rate hearing.

21 The other main input is the loads of the
22 utility and although there's some judgment in preparing
23 the load forecast, by the time you get to a cost of
24 service study you -- you've generally settled on what you
25 consider to be a reasonable load forecast and that's the

1 -- that's the type of thing utilities routinely do. So
2 the load forecast is -- is relatively sound typically by
3 the time it gets to a cost of service study.

4 The -- there -- there is a certain amount
5 of judgment in how one considers that load forecast and
6 breaks customers into classes and we've seen that
7 discussion here somewhat that there's -- that there's in
8 developing classes there's a need to consider customers
9 who have similar characteristics, who put similar --
10 impose similar costs on the system being grouped together
11 and that's not always -- always the easiest exercise.

12 No two (2) customers are, in fact, alike
13 even if you break a residential class, people who work
14 days and people who work nights put different constraints
15 and loads on the system. So, as an example, you -- you
16 can never get two (2) consistently. But as a class the
17 residential group is -- is typically one of the things
18 you'd look to as a class.

19 You may also, in doing the class, consider
20 policy implications such as in Manitoba now where we have
21 one (1) rate zone. We don't divide customers based on
22 where they live even though they may have different cost
23 characteristics.

24 Once those three (3) are there we get to
25 the typical three (3) steps that have been talked about,

1 functionalization, classification and allocation. And of
2 those three (3), functionalization is typically the step
3 that has the least judgment involved. It's usually
4 relatively easy to determine whether an asset is a
5 generation asset, a transmission asset or a distribution
6 asset. In some cases they're even owned by different
7 utilities who do different functions.

8 The classification stage is typically
9 where most of the debates occur as to whether those
10 assets are serving demand or energy or whether they're
11 being driven by demand or energy considerations.
12 Allocation is primarily a mathematics step. So outside
13 of deciding between whether it's one (1) peak or two (2)
14 peaks that drive the system it's -- it's generally a
15 relatively rote procedure by the time it gets to
16 allocation.

17 So the -- functionalisation, which is a
18 key point in this hearing would be one of the steps that
19 has -- that one wouldn't think of as having a lot of -- a
20 lot of judgment involved beyond -- beyond the odd case
21 where transmission lines are called generation for the
22 purposes of a cost of service study.

23 MS. TAMARA MCCAFFREY: Mr. Bowman, what
24 about the proposals to introduce new approaches to the
25 cost of service method such as marginal cost and to

1 weighted cost of service studies; could you comment about
2 that please?

3 MR. PATRICK BOWMAN: Yes. We were just
4 saying that cost of service is -- is -- is an analytical
5 tool, but in regards to these type of new approaches our
6 general approach would be, one would want to tread
7 carefully.

8 In a case where new approaches are needed
9 you would still want to have due regard for long-
10 established practice in a jurisdiction and why those
11 approaches arose. Some consideration for the time and
12 energy that went into developing them.

13 And also -- but one would also want to
14 look to the first principles for cost allocation and --
15 and potentially precedent from other jurisdictions which
16 can also be very informative in -- in developing those.

17 I would say that due care is particularly
18 true if one is -- is, sort of, throwing out an old
19 approach to move to a new approach that usually the
20 methods that are in the cost of service study,
21 particularly in regulated jurisdictions that have been
22 regulated for a while, have been -- have been debated and
23 had some time and energy go into developing them.

24 And so one would want to have due care for
25 what was considered at that time and the record that was

1 before the people who -- who led to that -- that
2 decision.

3 MS. TAMARA MCCAFFREY: I'd like to go to
4 the heart of the issue then, given what you've said about
5 due care and the amount of time and energy that's gone
6 into developing systems before and -- and you're talking
7 here about respect for the regulatory precedent, I think.

8 Right off the hop why don't you tell the
9 Board how should export revenues be credited in a cost of
10 service context and then we'll continue our discussion a
11 little bit more about the due care issue?

12 MR. PATRICK BOWMAN: Well, without moving
13 to history within a jurisdiction, based on first
14 principles, other revenues that can be generated by
15 utility assets are typically credited against the utility
16 assets that give rise to those revenues.

17 And that's true for any type of revenues
18 that the Utility can generate. If it can sell its
19 billing services to a third party and -- and generate
20 some revenues, you would credit that against the -- the
21 billing function. If it can lease space on its
22 distribution poles to the cable company, you would credit
23 that against the distribution system.

24 So first principles, exports follows the
25 same logic, that if it can generate additional power from

1 the bulk power system, the generation and transmission
2 assets, you would typically, based on first principles,
3 credit that back against the generation and transmission
4 assets.

5 MS. TAMARA MCCAFFREY: Okay. But is
6 there a point where one has to leave regulatory precedent
7 behind, times have changed -- that's what we're hearing
8 in this hearing -- times have changed, now we're in a
9 different world and it's no longer appropriate, Manitoba
10 Hydro and CAC/MSOS is asserting, to -- to continue to
11 assign export revenues to those functions because
12 essentially the export revenues, the net export revenues
13 are so high.

14 So what is your comment with respect to
15 that? Does it still make sense? Are you -- are you
16 maintaining that this old way is -- is still the right
17 way even though the world has changed?

18 MR. PATRICK BOWMAN: In regards to
19 dealing with breaking new ground, in a technical exercise
20 such as cost of service, one would want to look to the
21 guidance that's available from the -- the resources of
22 the types we've talked about, guidance in terms of first
23 principles of -- of cost allocation from other
24 jurisdictions and -- and as well as the basis for the
25 long-standing decisions made in -- in the jurisdiction.

1 I made reference to the NARUC manual, the
2 NARUC manual sets out the same first principals that I
3 just went through in terms of other revenues generated
4 from Utility assets, they would be credited against the
5 Utility assets that give rise to those revenues.

6 In regards to other jurisdictions, we have
7 evidence in this proceeding, particularly the survey that
8 was done by NERA, of how other utilities, which are set
9 out as the most similar they could find to Manitoba
10 Hydro, treat their export revenues.

11 And -- and there are only effectively two
12 (2) treatments noted in the NERA survey. One (1) is
13 export revenues, the dollars that are credited against
14 the assets that give rise to them, particularly
15 generation, and the other is export revenues that are not
16 otherwise credited back to customers via cost of service
17 approaches. The --

18 MS. TAMARA MCCAFFREY: So you're saying -
19 - sorry to interrupt you --

20 MR. PATRICK BOWMAN: Yeah.

21 MS. TAMARA MCCAFFREY: -- Mr. Bowman,
22 you're saying so there's two (2) different issues here
23 that we're looking at, the export revenues within the
24 cost of service and then the export revenues which you
25 say -- you're suggesting goes beyond the cost of service.

1 Is that right, sir?

2 MR. PATRICK BOWMAN: Sorry. Not -- not
3 quite. The -- we're talking about cost of service method
4 and what I'm saying is that based on the NERA survey,
5 practice in other jurisdictions and first principles,
6 one doesn't end up with the conclusion that exports would
7 be credited against anything other than generation and to
8 some degree transmission.

9 If the -- if the problem that's posed is -
10 - is breaking new ground, having gone beyond what any of
11 those things have -- have dealt with before, it doesn't
12 mean one would want to leave the first principles, but it
13 does mean that there -- you would want to have due care,
14 maintain regard for the first principles and be --
15 consider at what point you've crossed the -- the point
16 that export revenues no longer follow the costs that were
17 incurred to achieve them or the costs that are routinely
18 incurred to achieve them, and at what point they become
19 surplus to a cost allocation method.

20 At that point, I think simply put, they
21 bear no linkage to a cost -- to cost allocation. They
22 bear no linkage to cost. And they just don't belong in a
23 technical tool that's meant to allocate cost to -- to
24 loads. They don't -- they don't fit anymore. They're a
25 complete outlier to the concept of a cost of service.

1 MR. ROBERT MAYER: Well then, Mr. Bowman,
2 assuming that we have one (1) or two (2) export classes
3 and assuming that Hydro can properly assign the costs to
4 those export classes, then everything -- if I heard you
5 correctly -- then everything that Hydro earns in addition
6 to or over and above those costs to supply that service
7 become what we would call excess revenue and, as I
8 thought I just heard you say, do not fall into the cost
9 of service analysis.

10 It sounds to me like you're getting
11 awfully close to where Mr. Lazar was, saying that what we
12 now have is this net -- real net export revenue as to
13 what we used to have, after all the costs have been paid,
14 we have what some people might call an over contributing
15 class because the export class is over contributing on
16 its costs.

17 How close was Mr. Warden and to some case,
18 Mr. Lazar, that says there is no right for any consumer
19 to have that money contributed back, but in fact that
20 goes to debt repayment or it goes to other social
21 purposes or it goes deal with Hydro's debt equity.

22 MR. PATRICK BOWMAN: Mr. Mayer, you've
23 framed the problem quite well. Your comments at the
24 outset were very close to where we were at. I might
25 comment a bit later on the latter part of your statement.

1

2 At this point, we've been asked to wear a
3 hat as an analyst and a professional who does cost of
4 service studies and says tell me the methodology that
5 fits for treating export revenues.

6 And the methodology that fits for treating
7 export revenues is you credit them against the class that
8 arises. If the intention is -- but we have too much to
9 do that, they don't link to that class anymore, they're
10 over contributing to use your words, the comment would be
11 okay, at what point do they begin to over contribute?

12 And if so, at that point, if they bear no
13 linkage to cost, the cost of service analyst, the cost of
14 service person preparing the study would say then, they
15 don't belong here.

16 They're no longer anything I can
17 principally -- deal with based on the principles in the
18 cost of service study. So they don't belong in a tool
19 that's designed to determine the cost imposed on the
20 system by each customer class.

21 That's a concept we've given a term,
22 threshold. But it's a concept I think it's talked about
23 by everyone in the room, we've just given it a name.

24 The second comment you made was in regards
25 to the export class. And my -- I'd like to deal with

1 that in a bit of detail. But if I can jump to the third
2 part of what you said, is in regards to the excess,
3 aren't we into no rules, we can do anything -- anything
4 with it.

5 At that -- I don't entirely agree with
6 that. I'm saying we're not into any cost of service
7 rules. There are basic principles that go beyond that in
8 terms of regulating the utility which would say revenues
9 that are derived from Manitoba Hydro, and the basic
10 policy frame for Manitoba Hydro is it provides power at
11 cost, and to the extent it can generate revenues of that
12 type, the basic premise and the communications to
13 ratepayers and the legislative framework is that those go
14 to the benefit of ratepayers.

15 So we're outside of the cost of service
16 world, but there's still some guidance. But within the
17 cost of service world the point would be you don't have
18 cost of service rules beyond a certain point if you've
19 crossed the point where they have a linkage to costs.

20 MR. ROBERT MAYER: But Mr. Bowman you say
21 the principles say that in a regulated utility the
22 excess, after the costs are paid, go back to the
23 ratepayer.

24 Is it not just as logical and just as
25 principled to suggest that that excess after the -- every

1 other class has paid its fair share, the over
2 contributing class being the export and nobody plans on
3 sending money back to the States, so there's one of the
4 customers that aren't going to get any of this so-called
5 benefit; is it not just as principled to return that
6 money, that profit, as it now -- because I realize we
7 don't use that term in this room when we're dealing with
8 hydro, but that profit, doesn't that become the property
9 of the shareholder?

10 MR. PATRICK BOWMAN: We're dealing with a
11 broader context, Mr. Mayer. As I said, I wanted to make
12 sure I was being clear about my comments being in the
13 cost of service box and the cost of service analyst
14 saying, I'm -- that it's outside of my realm.

15 In the broader box and this is -- we spend
16 a fair bit of time saying that the one (1) of the issues
17 in this hearing is that the proposals are being put
18 forward, as we have to solve this in the cost of service
19 box.

20 And it doesn't belong there, which is
21 exactly what you and I are talking about now. It's a
22 broader context.

23 It's inherently a revenue requirement
24 context. It's how much overall level of rates do we
25 require from domestic ratepayers. And the question is,

1 we know what the costs of Hydro are, they're relatively
2 easily -- easy to determine in setting a revenue
3 requirement, it's how much you take off of those costs as
4 the credits that are coming back from exports.

5 So its inherently a revenue requirement
6 topic. But the switching the hats to the revenue
7 requirement side of a utility of this type there are some
8 different tools and analysis that -- that goes into the
9 consideration. They're not entirely different but
10 certainly the -- the policy framework in the jurisdiction
11 and the premise on which the system was -- was built and
12 the legislative framework and the regulatory framework
13 are key considerations.

14 And in the current framework in Manitoba
15 and in the thirty (30) or twenty (20) years, now almost
16 twenty (20) years that Manitoba has been regulated and
17 certainly in the almost forty (40) years since the major
18 move to -- to go to the north -- or are we almost fifty
19 (50) maybe, the major move to go north, the policy
20 framework hasn't been that focussed.

21 It has been, to the extent that the north
22 can be developed, low cost resources put in place, export
23 markets capitalized on. The benefits are -- show up in
24 terms of -- of benefits to ratepayers.

25 All the way down though in that -- that

1 microcosm of the cost of service study it's not
2 inherently in the cost allocation process but it is in a
3 revenue requirement framework Hydro is -- is designed to
4 provide power at cost. Cost is net of export revenues
5 that are not -- that are not being paid out for water
6 rentals or for other -- other policy directives from the
7 government and those go to lower rates.

8 So in that framework, in this room, export
9 -- any export revenues, excess or other, would need to be
10 considered as to the best way to benefit ratepayers but
11 it's not -- it's not a cost driven tool. It's a
12 different set of -- set of tools.

13 MR. ROBERT MAYER: Thank you.

14 MS. TAMARA MCCAFFREY: Thank you, Mr.
15 Bowman.

16
17 CONTINUED BY MS. TAMARA MCCAFFREY:

18 MS. TAMARA MCCAFFREY: Just following up
19 on Mr. Mayer's comments and questions to you, does
20 creating an export class, as Hydro has done here, and
21 assigning it embedded costs ensure that exports have
22 fully paid for their own costs?

23 MR. PATRICK BOWMAN: Based on what we've
24 reviewed in the filing and what we understand of Hydro's
25 system and plans for Hydro's system, no.

1 The main reason is because the export
2 class in a cost of service is inherently based on a
3 principle of embedded costs in sharing equally in the
4 assets and sharing equally in the costs to operate them;
5 that -- one (1) kilowatt hour is not ahead of another in
6 terms of priority or sequence.

7 On review of the evidence in the
8 proceeding our assessment is that exports are not an
9 average cost type of power. We've heard about the type
10 of costs that are incurred to secure exports. We've
11 heard about the, in some cases, chasing high cost power
12 so it can be sold for a higher cost. Sharp pencils and
13 margins.

14 We know that various power resource plans
15 and supplies are being pursued to put in place based
16 inherently on export markets that are higher cost than
17 average and each of those resources that it would put in
18 place are also higher costs than average.

19 They're -- they're not the low hanging
20 fruit and to the extent there was low hanging fruit it's
21 captured and we're moving on to the next -- the next
22 phase.

23 Whether that be DSM or the DSM plans,
24 capture the -- the easiest resources that could be
25 secured primarily based on the value that they secure

1 from export markets and now we're moving on to the -- to
2 the next step in them.

3 But there's a long list of -- of power
4 resource acquisitions that are fundamentally being based
5 looking solely at the export price, not looking at being
6 below average cost and that's -- that's only more so as
7 one looks into the future.

8 The other reason that the export class
9 fails, and I'll just note that particularly we dealt with
10 this at IR CAC/MSOS-7(b). The other reason that the
11 export class doesn't necessarily achieve the purposes of
12 determining what is -- what is excess in the system that
13 was contemplated is the matters that Mr. Mayer and I were
14 just recently discussing, which is that the premise in
15 Manitoba was not that customers will be held whole from
16 exports.

17 The premise is that customers would see
18 benefits from the exports and they took on risks in
19 regards to developing the projects and pursuing the
20 northern developments, debates as to how risky they were
21 when they were done, but today we know the -- that those
22 -- those projects have turned out to be a -- a
23 substantial heritage, wise decisions. So that's why we
24 are able to be in this room today and -- and debate the
25 matters that are before us.

1 But the -- the NERA class -- the NERA's
2 approach to exports, for example, even if it were to
3 recognize that exports are higher cost than -- than
4 average, it -- it only seeks to keep customers whole. It
5 doesn't seek to do something more than that. And -- and
6 the premise is not that customers would kept whole from
7 exports.

8 MS. TAMARA MCCAFFREY: Just to make sure
9 I understand you. The NERA approach achieves the keeping
10 customers whole objective, and you're saying that's not -
11 - that isn't the objective, that the hydro system was
12 designed and the export -- the hydro system that provides
13 the export was designed with in mind. They had in mind
14 an objective of actually benefitting the Manitoba
15 customers beyond keeping them whole.

16 MR. PATRICK BOWMAN: Not quite. What I'm
17 saying is that NERA's export class is the -- is the wrong
18 tool for determining the split between what -- what
19 exports are costing the system today and what would be
20 excess, because it's inherently based on embedded or
21 average costs, and that's not the way that exports are --
22 are considered in the Manitoba Hydro system.

23 MS. TAMARA MCCAFFREY: We've heard the
24 suggestion, Mr. Bowman, that the infrastructure with
25 respect to generating stations and -- and plant is

1 already there to provide domestic load. And accordingly
2 the cost then of providing exports are -- are relatively
3 low, and particularly we've heard some evidence from Mr.
4 Cormie in terms of when one looks at the whole hundred
5 (100) year lifespan of a -- of a generation station.

6 Can you comment on that in light of the
7 comments that you're making that -- that the costs to
8 serve exports are not as low?

9 MR. PATRICK BOWMAN: Yes. I would say
10 that this is a point on which there is quite a
11 fundamental disagreement in the room.

12 I would -- reviewing the evidence put
13 forward by Hydro and others, the key focus seems to be on
14 exports, particularly opportunity exports are a low value
15 product, they're not particularly firm, and that
16 therefore are -- are low cost and that the system is not
17 designed to plan for them. That does not seem to bear
18 out on our review of Hydro's system and the way that it's
19 operated and planned today.

20 Particularly with regards to opportunity
21 exports, the basis for an argument such as Hydro is
22 putting forward is that you're selling a byproduct, a --
23 a waste stream, it's -- it's found money. As long as it
24 pays for the cost to deliver it, everything beyond that
25 is -- a term that was used in the old debates here -- was

1 gravy.

2 There are utilities who have those type of
3 -- of sales. In -- in the Yukon we deal with a utility
4 that has a hydroelectric plant. The mine closed down.
5 Their surplus hydro, ratepayers have to pay for the hydro
6 anyway. There's no exports to be able to sell it. So
7 they develop a surplus energy program to sell that power
8 to people for electric heating.

9 It's interruptible. They would never
10 build plant to serve that rate. They don't plan their
11 system based on serving people under that rate. They
12 don't incur costs to serve people under that rate. It's
13 -- it's basically a waste product revenue stream.

14 That is -- that type of thinking would
15 lead to the type of cost of service conclusions that
16 Hydro is putting forward. That is not the premise in
17 Manitoba for exports and opportunity exports.

18 The premise we've talked about is the --
19 is actually considering opportunity exports and
20 definitely firm exports in making decisions to commit to
21 capital projects, in making decisions to purchase power
22 and chase margins, and in all sorts of other decisions
23 we've talked about, be they DSM projects or buying wind
24 or a bunch of other things. That is not waste product
25 revenues. Those are core, inherent to the system, type

1 of revenues.

2 So on -- on that matter we -- we agree on
3 -- to the extent that one would say, These are low value
4 sales. Opportunity sales are not firm, take them while
5 you can get them. Yes, that's a low value product, but
6 it doesn't mean it's low cost to serve. It is inherently
7 a quite high cost to serve.

8

9 (BRIEF PAUSE)

10

11 MS. TAMARA MCCAFFREY: It's been
12 suggested that it's time to change the cost of service in
13 order to keep up with the times and we've talked a little
14 bit about this already.

15 So, what about the proposal to credit some
16 export revenues to distribution? Is this a new
17 innovative way of dealing with the surplus?

18 MR. PATRICK BOWMAN: Well, it's not a new
19 proposal. It's definitely been around before this Board
20 for the better part of its life. And in reviewing the
21 history in this jurisdiction it certainly has been
22 rejected every time its arisen.

23 The main basis for the rejection that
24 we've seen is the Board indicating that crediting export
25 revenues to distribution where they bear no link, is mere

1 judgment and compared to what I was saying earlier about
2 the cost of service study having judgments involved, but
3 they're informed judgments based on linking the system to
4 the costs.

5 Presumably what this Board was meaning by
6 mere judgment, is not the level of informed judgment
7 linking the system to the costs.

8 The proposal to credit export revenues to
9 distribution as we've seen it put forward does not appear
10 to be a carefully considered proposal being pursued on
11 its merits. It's not a suggestion that distribution
12 gives rise to the exports.

13 It's not a suggestion that there's any
14 functional linkage there whatsoever. In that regard,
15 this is the same argument that's quite stale.

16 But ultimately the conclusion falls out of
17 the way Hydro's approached the problem, that within the
18 four (4) walls of the cost of service study it was trying
19 to find a solution to the problem that doesn't belong
20 within those four (4) walls.

21 Sort of the old phrase, when the only tool
22 you give yourself is a hammer you tend to see every
23 problem as a nail. Within the four (4) walls of the cost
24 of service study you only have generation, transmission
25 and distribution functions, ultimately.

1 If you've convinced yourself generation
2 and transmission can't get any more, there's only one (1)
3 place to go. It's not that it's been debated on its
4 merits, it simply falls out.

5 MS. TAMARA MCCAFFREY: In the context of
6 your discussion about a threshold is this an idea that
7 you've developed?

8 MR. PATRICK BOWMAN: Well, it's a -- we
9 wanted to put a term to a concept that was floating
10 around the room quite solidly. Sort of as I discussed
11 with Mr. Mayer earlier.

12 The basic case is that there's -- that
13 beyond some point we need a new set of rules. And we
14 just chose the term threshold to try to define the point
15 and add some language to help ensure that we could all be
16 clear about what we're talking about.

17 MS. TAMARA MCCAFFREY: In your view, is
18 it important to examine the threshold?

19 MR. PATRICK BOWMAN: Well, yes it's
20 important in a -- particularly in a revenue requirement
21 context to do the kind of thing that Mr. Mayer and I were
22 talking about earlier, which is to determine how much of
23 these export revenues ultimately will flow to the cost of
24 service study and how much we need to think about other
25 opportunities to deal with it.

1 Coming up with a dollar value of the
2 threshold will be an exercise. It's not been the focus
3 of our work, what -- be it in millions of dollars or in
4 cents per kilowatt hour. And we don't -- to be clear we
5 don't need to define a threshold to be able to deal with
6 cost of service today.

7 It would be -- it's a revenue requirement
8 matter that ultimately becomes important when one moves
9 onto the setting the level of rates. We did try to spend
10 some time though examining the concept and how it -- how
11 it fits. And this is -- this is at table 3.1 of our
12 evidence which is at page 15 --

13 MS. TAMARA MCCAFFREY: Page 15.

14 MR. PATRICK BOWMAN: -- yes.

15

16 (BRIEF PAUSE)

17

18 MS. TAMARA MCCAFFREY: Can you discuss
19 this table, you're referring to table 3.1. Take us
20 through that Mr. Bowman, what are you doing there?

21 MR. PATRICK BOWMAN: Well, this table was
22 just trying to compare over time some numbers coming out
23 of the cost of service study. At the top of the table is
24 the gross export revenues that are flowed through to the
25 cost of service study from the revenue requirement.

1 The second line takes off the directly
2 variable costs incurred to serve exports. There's
3 basically no -- no debate that if you need to serve an
4 export and need to pay a water rental to generate the
5 kilowatt hours to serve the export that's clearly a cost
6 of the export; that level of costs there's -- there's no
7 -- been no debate on over time. It's quite clear.

8 That number has gone up substantially
9 though as -- as fuel costs, purchase power and
10 particularly water rentals have gone up to reflect the
11 increasing value of the export market.

12 Uniform rates allocation would also be a
13 policy matter that's been decided to come out of this
14 part of the equation so that the net export revenues
15 we're talking about in the cost of service study is shown
16 in the bolded line about the middle of the table.

17 And the key point we were dealing with
18 there is -- is the extent to which these have -- these
19 have grown and changed since they were considered. And,
20 in particular, we were struck by the extent to which they
21 have not grown and changed, particularly since 2002.

22 There was clearly a change between the
23 early '90's and 2002 but we've been dealing with this --
24 this new level of revenue for a while. We haven't
25 necessarily been dealing with the new level of costs

1 being incurred to chase that revenue for a while that's -
2 - that's catching up now.

3 In terms of the total bulk power costs --
4 in terms of thinking about this revenue, it's just a
5 number but what does it -- what does it mean. We simply
6 did a comparison to the total bulk power costs of the
7 Utility to put it in terms of a -- of a percentage and
8 you can see the total bulk power costs which have fairly
9 substantially increased over time.

10 And increased over time in a period where
11 no new plant was being put in place to serve domestic
12 load. That the -- the -- as a percentage of the total
13 bulk power costs you can see the growth, and in
14 particular the jump between '96, '97 and 2002 from about
15 32 percent of total bulk power costs to about 42 percent.

16 Since it went to about 42 percent it's --
17 it's today again back at about 42 percent although it was
18 higher at the time of the 2004 GRA.

19 MS. TAMARA MCCAFFREY: You're referring
20 to a line at the bottom of the table, percentage of bulk
21 power costs covered by net exports; is what you're
22 talking about there?

23 MR. PATRICK BOWMAN: Yes, that's correct.
24 Now, I just note that we -- we looked at the concept of a
25 threshold in the context of this table and said for the

1 purposes of discussing it does this give us something
2 simple that we can use to go on with discussing this.

3 MS. TAMARA MCCAFFREY: And you did do --
4 some of that discussion is found at page 16; is that
5 right, sir, where you're -- where you're playing around
6 with the idea of what a threshold might look like?

7 MR. PATRICK BOWMAN: Well, we wanted to
8 put a ability to debate this with some concepts with some
9 samples more so than just at the theoretical level. So
10 we -- looking at -- at that type of numbers we were
11 talking about a threshold that maybe somewhere in the
12 transition period between 96/97 and 2002 based on a
13 percent of total generation.

14 And I just want to be really clear about
15 this, that is not what we would suggest going forward as
16 what one would want to use as a way to define the
17 threshold. There has been some useful information in
18 terms of the real change being unit values not total
19 dollars and total dollars will change markedly when
20 things like Wuskwatim comes on line or other types of
21 projects that are pursued.

22 But it's a -- but it's a way to allow for
23 the discussion in this -- in -- in this evidence in the
24 absence of having had careful consideration go into how
25 one would define the -- an excess.

1 MS. TAMARA MCCAFFREY: So here you're
2 talking about total dollars but you're suggesting that
3 maybe looking at the unit value might be a more useful
4 measure when the time comes to really examine this
5 threshold issue; is that right, sir?

6 MR. PATRICK BOWMAN: Yes. The --
7 defining the threshold is not a requirement in terms of a
8 cost of service hearing. A cost of service hearing needs
9 to deal with cost of service methodologies that would
10 inherently flow from the revenue requirement that's being
11 passed on as an input.

12 If there's a problem in the revenue
13 requirement then it needs to be solved outside of that.
14 It doesn't change how you come to a conclusion in your
15 cost of service methodology.

16 So that's why we -- it hasn't been the
17 core of -- of -- of our -- of our focus. We would say
18 specifically though the -- we would suggest that in terms
19 of going forward from this point that within the cost of
20 service study all of export revenues be credited against
21 the assets that give rise to them that bear -- that
22 maintain the cost causation link.

23 That -- moving to the next revenue
24 requirement hearing, that Hydro should -- we would
25 recommend that Hydro bring forward proposals as to how to

1 evolve over time to deal with the export credits that
2 would be in excess of what they determine could be
3 reasonably credited in the cost of service study; that
4 they bring forward proposals on how to determine that
5 level of the threshold for -- for debate within a revenue
6 requirement context, and that level of the threshold will
7 evolve over time so -- methods that are reasonably
8 durable over time; and -- and finally proposals as to how
9 to account for these excess and if they're going to be
10 used for the benefit of -- of ratepayers, how -- how
11 should they be accounted for.

12 And -- and we have some comments on
13 stabilization reserves and others later in the evidence.

14 MS. TAMARA MCCAFFREY: And I also note
15 for the record that there was some additional discussion
16 about that point in the CAC/MSOS/MIPUG IR number 8.

17 Now, I'm going to ask you, Mr. Bowman, why
18 does this proposed change matter to MIPUG?

19 It's been suggested that perhaps their ox
20 is being gored, they're losing something that they had
21 before. We've heard the number come out, \$22.7 million
22 in extra costs to the industrial class arising from
23 Hydro's proposals. That was referenced in Mr. Peters'
24 cross-examination.

25 What is your comment with respect to that?

1 MR. PATRICK BOWMAN: Well, I can only
2 comment to the extent that we've approached this as an
3 analytical exercise.

4 The -- the numbers we're talking about,
5 22.7 million was the -- the number that comes out from
6 the crediting of exports. 22.7 million is the adverse
7 impact on industrial customer costs from crediting export
8 revenues to distribution as proposed by Hydro. That --
9 that's where that number arises.

10 I just want to be very clear though, that
11 is a cost of service impact, not a bill impact. We spent
12 a bit of time on this in our Attachment B and Figure B-1,
13 which is at page 33 of our evidence, which I can -- I can
14 go through the figure.

15 MS. TAMARA MCCAFFREY: Sure. Why don't
16 we -- why don't we turn to that now.

17 MR. PATRICK BOWMAN: Sure.

18 MS. TAMARA MCCAFFREY: Figure B-1, that's
19 the graph on page 33, sir?

20 MR. PATRICK BOWMAN: Yes. And on that
21 figure, these are the revenue cost coverage ratios that
22 come out of the cost of service study based on the
23 existing methodology that's been in place. And the \$22.7
24 million is comparison to the existing methodology.

25 So this is -- this is saying, What are the

1 numbers that are going to change by that amount. The
2 line with -- the solid black lines that start at one ten
3 (110) and ninety (90) and -- and narrow down are the zone
4 of reasonableness as has been defined by this Board in
5 its careful consideration in the past. And the -- the
6 line with the squares is the general service large
7 greater than 100 kV. That's the industrial customer
8 class.

9 And Mr. -- Mr. Turner's comments when he
10 was here earlier about industrial customers paying above
11 their cost, that -- that's effectively the -- the matter
12 he's talking about, is that line with the square being
13 well above the zone of reasonableness.

14 My -- my point is just that even under
15 Hydro's proposals which reduce -- increase the costs
16 assigned to the -- the industrial customer class by \$22.7
17 million, we're not talking about a bill impact tomorrow
18 or even at the next rate hearing of that kind of number.
19 This is -- this is a cost impact, not -- not a bill
20 impact.

21 Being up at 114.7 percent as they are, the
22 current gap is more than \$22 million. So even if 22
23 million is taken out of the system or added as cost to
24 them, they're still paying above their cost. So they're
25 not in for some massive increase.

1 But the -- the number is not fictional.
2 The cost -- the cost impact has been a key concern, a
3 longstanding concern for MIPUG. It's been around almost
4 twenty (20) years.

5 And I just note, compared to what we're
6 talking about in terms of a threshold and the dollars
7 being -- being not credited back through the cost of
8 service study, we're talking about similar impacts,
9 similar directional impacts on industrial customers cost.
10 Hydro's proposal adversely impacts the industrial
11 customer class by about \$22.7 million.

12 Under the types of numbers we were
13 discussing in our discussing in our sample threshold of
14 fifty (50) to \$100 million of exports being in the excess
15 range, should it come out that way, the adverse impact on
16 industrial customers is very similar in terms of their --
17 their costs.

18 The difference is what's happening to that
19 money, given that those costs are going up. The
20 difference is ultimately in the proposal that's being put
21 forward for those average costs.

22 And ultimately Hydro's proposal is
23 effectively to take those dollars and credit them to the
24 distribution system today, whereas we're saying surely we
25 can think about the level of Hydro's debt, long term rate

1 stability, preparing for drought and do something a lot
2 more sensible than simply crediting it against the
3 distribution system, to which they bear no functional
4 link.

5

6

(BRIEF PAUSE)

7

8 MS. TAMARA MCCAFFREY: Thank you for that
9 Mr. Bowman. Let's get back now to another portion of
10 your evidence at page 17 where we're going to follow up
11 on your last answer and we're going to talk about
12 treatment of export revenues beyond the threshold.

13 Can you take us through this portion of
14 your evidence, sir?

15 MR. PATRICK BOWMAN: Well, this goes more
16 to the third matter that Mr. Mayer and I were talking
17 about earlier which is, if these revenues bear no linkage
18 to costs what guides you in what to do with them?

19 We went through three (3) different
20 matters here that have been discussed or raised before
21 the Board. The first one (1) has some appeal, that one
22 (1) would find a link between the excess export revenues
23 and Hydro's current level of debt and reserves and
24 preparing for a next generation of building and taking on
25 new debt. And also dealing with risk of future droughts.

1 MS. TAMARA MCCAFFREY: This is the
2 regulated reserve fund that you're referring to?

3 MR. PATRICK BOWMAN: Yes, that's the
4 language we use. It's not meant to be specific and I
5 have some comments about the differences there.

6 But ultimately we're talking about long
7 term reserves, risk mitigation and paying down debt as
8 being the core focus.

9 The second one (1) that's noted there is
10 the comment by Mr. Mayer that, what about paying out a
11 surplus or an excess towards government for other social
12 policies and reviewing that type of proposal, outside of
13 legislative constraints or public policy decisions about
14 whether that's what -- that's the way Hydro should be
15 regulated, we would certainly say that even if the export
16 revenues are excess compared to their costs, they're not
17 surplus to the electricity system, given the current
18 level of reserves in Hydro.

19 Even utilities that are paying dividends
20 to governments and that sort of thing are not -- are not
21 doing that when they're at the debt equity levels or the
22 reserve levels that Hydro is at.

23 MS. TAMARA MCCAFFREY: So just to make
24 sure we have your response clear, it's not an opposition
25 to payments of surplus to a shareholder per se that

1 you're objecting to in the evidence, your point being,
2 just not given the present circumstances of Manitoba
3 Hydro, in terms of the their debt and risks?

4 MR. PATRICK BOWMAN: I would say beyond
5 that having a policy framework for that, I would also say
6 that Hydro is not at a level of finances that one (1)
7 would want to recommend that. And I think we heard the
8 same thing out of others.

9 And then quickly at bullet c) on the next
10 page, we simply go over what other proposals that people
11 have talked about, like one (1) time payments to
12 customers and we wouldn't advise that and the reasons are
13 set out there.

14 MS. TAMARA MCCAFFREY: Do you care to
15 elaborate on that, or you're content with your written
16 evidence which you'd adopt in that regard?

17 MR. PATRICK BOWMAN: Well, we're just
18 saying these are ongoing amounts, payoffs to customer are
19 short term benefits, they don't deal with long term rate
20 stability which are key issues, as well as reserves.

21 And they're -- they're presumably annual
22 amounts. So it's different than say the cheque I got
23 from MPIC which I understand to be a one (1) time deal.
24 I shouldn't be banking on that, I hear.

25 MS. TAMARA MCCAFFREY: Mr. Chairperson,

1 at this point we have -- we're through a good chunk of
2 the evidence but we do -- we're not quite there. Is
3 there interest in a break? I've noticed that the hearing
4 has been sitting for about an hour and a half and I leave
5 it to you as to when you'd like to call a --

6 THE CHAIRPERSON: Yes -- I think this is
7 an appropriate time.

8 MS. TAMARA MCCAFFREY: Thank you.

9 THE CHAIRPERSON: Come back in fifteen
10 (15) minutes. Thank you.

11

12 --- Upon recessing at 10:55 a.m.

13 --- Upon resuming at 11:17 a.m.

14

15 THE CHAIRPERSON: All right, Ms.
16 McCaffrey, you can begin again.

17 MS. TAMARA MCCAFFREY: Thank you.

18

19 CONTINUED BY MS. TAMARA MCCAFFREY:

20 MS. TAMARA MCCAFFREY: Mr. Bowman, in sum
21 then, Section 3.1 of your evidence, and things you've
22 been talking about just before we took the break, they
23 may be read so as to require rate increases; isn't that
24 right, sir?

25 MR. PATRICK BOWMAN: Well, we dealt with

1 this in Interrogatory -- two (2) Interrogatories that we
2 received. One was CAC/MSOS-9 and one was Manitoba Hydro
3 11.

4 But simply put under some conditions,
5 particularly over the short term, rates would be higher
6 than they would have been without it. Once one
7 transitions to not crediting any portion of export
8 revenues back to customers, if indeed some portion is
9 determined to be excess, it's a revenue requirement
10 question.

11 But if, indeed, some portion is determined
12 to be excess and is not credited back to customers in the
13 short term the transition would be to higher rates.

14 Over a -- over a longer term the point is
15 what we're suggesting or recommending is that those
16 dollars remain in the electricity system to deal with
17 paying down Hydro's debt and building up the reserves
18 that are available for the next drought and those matters
19 which would ultimately lead to more stable rates over
20 time and ultimately the same level of -- of rates, if not
21 lower, over the long term.

22 THE CHAIRPERSON: We're not setting rates
23 here at this moment, but just a question. When you say
24 "higher rates" are you talking about higher rates other
25 than the 2 and a half percent a year that Hydro's got in

1 their IFF going out into the future?

2 MR. PATRICK BOWMAN: Mr. Chairman, all
3 other things being equal, the answer would be yes.
4 Hydro's IFFs often show 2 and a half percent rate
5 increases going every year into the future that don't
6 always materialize.

7 But ultimately if those rate increases are
8 based on achieving a level of reserves by a certain point
9 in time and crediting back effectively all export
10 revenues to rates in the year that those export revenues
11 arise or are forecast to arise.

12 We're saying that if they're really excess
13 under anyone's proposal they wouldn't be credited back to
14 customers in the year they arise.

15 So over a period of transition, yes there
16 would need to be higher rates that would actually
17 contribute to greater reserves. Otherwise -- otherwise
18 you run into the mathematical impossibility that Mr.
19 Warden was effectively referring to, that there was no
20 new money.

21 THE CHAIRPERSON: Thank you.

22

23 CONTINUED BY MS. TAMARA MCCAFFREY:

24 MS. TAMARA MCCAFFREY: Mr. Bowman,
25 moving onto section 3.2 of your evidence, do you have any

1 comments based on your review of the price signals
2 issues, just briefly?

3 MR. PATRICK BOWMAN: Yes, but very
4 briefly we didn't spent a lot of time on this section
5 because it is not the core of the matters in the Hearing
6 today. It was just to emphasize that the cost of service
7 proposals put forward that are said to improve price
8 signals, to people who work in this area, that's a
9 somewhat inconsistent language, because cost of service
10 does not equate to price signals. Rate design equates to
11 price signals.

12 And in regards to price signals, if a
13 concern is that rate signals to customers are poor at the
14 present time, one would want to get on with thinking
15 about ways to improve those price signals via rate
16 design.

17 And we put some details in there about how
18 one could do that. Again this is -- this is the area
19 that is quite artistic. It takes a different type of
20 debate than we're having here in this proceeding. We
21 make reference to some other jurisdictions and how
22 they've been able to deal with a more efficient price
23 signals, particularly with regard to industrials.

24 BC's been referenced, but also you know,
25 little old Yukon, whose had a rate that does this since

1 the 1980's, as far as I recall. And the corresponding
2 improvement in price signals and benefits that can arise
3 to customers from having those improved price signals, in
4 terms of seeing greater benefits from participation in
5 DSM or choosing to self generate, or indeed linking that
6 into the -- Manitoba Hydro's IPP policy so that those
7 price signals provide the same benefit on the other side
8 for a customer who wants to get on and develop generation
9 that they can sell back to Hydro, such as a forestry
10 operation.

11 MS. TAMARA MCCAFFREY: Thank you Mr.
12 Bowman. Just looking at the next section of the
13 evidence, we're going to go through the remainder of the
14 evidence quite briefly and hit the highlights.

15 I think the balance of our direct won't be
16 too much longer. In terms of section 4, the
17 classification, allocation of the bulk power resources,
18 Mr. McLaren, I'm going to give you an opportunity to
19 comment on that.

20 Did you have any concerns when you
21 reviewed Hydro's proposal?

22 MR. ANDREW MCLAREN: Yes, this is set
23 out on pages 21 and 22 of the evidence and the first
24 related to the sub-functionalization of export
25 transmission lines and the classification of those lines

1 to energy.

2 And based on our experience in other
3 jurisdictions and the NERA survey results we reviewed, it
4 appeared this treatment would be quite unusual and we
5 question the move away from recognizing capacity and
6 coincident peak as cost drivers for transmission systems.

7 However we understand from Manitoba
8 Hydro's rebuttal evidence that this proposal has been
9 withdrawn and is therefore no longer an issue.

10 MS. TAMARA MCCAFFREY: Thank you, sir.
11 On the export transmission lines, you noted that if Hydro
12 functionalized transmission lines into export and
13 domestic, that the domestic lines would be allocated
14 based on -- should be allocated based on a one (1) CP, is
15 that right sir?

16 MR. ANDREW MCLAREN: Yes that was our
17 position. Our comment on this matter was that if these
18 transmission lines were sub-functionalized that it would
19 be appropriate to allocate lines that primarily or
20 exclusively served domestic customers on the basis of one
21 (1) CP, in recognition of the fact that the domestic
22 system has a distinct winter peak.

23 However, we understand based on Manitoba
24 Hydro's rebuttal evidence that it has revised its
25 proposal in this regard and now proposed to classify the

1 entire transmission system to demand and allocate its
2 costs on the basis of the two (2) coincident peak
3 allocator.

4 In our view, the proposal as outlined
5 Manitoba Hydro's rebuttal evidence is reasonable and
6 should be approved.

7 MS. TAMARA MCCAFFREY: Thank you.
8 There's also been some detailed discussion in that
9 section that the weighting of energy based on marginal
10 costs is a good idea, but Hydro should use more than four
11 (4) periods, is that right sir?

12 MR. ANDREW MCLAREN: Yes, that's
13 correct. In our view the proposal for a marginal cost
14 weighted energy allocator, in general, is quite
15 reasonable. And the use of average inflation adjusted
16 historic surplus energy program rates is a practical
17 method for dealing with the issues related to commercial
18 sensitivity that were identified in previous proceedings.

19 However, we identified some concerns that
20 the use of only four (4) periods seemed too coarse to
21 capture the price variability in the data set. In our
22 view, it would be preferable to add more periods.

23 We understand from Manitoba Hydro's
24 rebuttal evidence that it would not be excessively
25 difficult to move to twelve (12) periods. And we further

1 understand from Manitoba Hydro's testimony at this
2 hearing that it would be willing to make the change to
3 twelve (12) periods even if only -- it only served to
4 increase the confidence of the parties in the
5 methodology.

6 In our view --

7 MR. ROBERT MAYER: Am I now correct in
8 assuming that -- I've heard twelve (12) periods from, I
9 think, Mr. Harper. I'm hearing twelve (12) from you. I
10 did read something in Hydro's rebuttal evidence about
11 they can live with twelve (12). I haven't yet heard
12 anybody who hasn't.

13 MR. ANDREW MCLAREN: That's our -- that's
14 our understanding as well. And, therefore, in our view,
15 the move to the allocator calculated on the basis of
16 twelve (12) periods is an improvement that should be
17 adopted.

18

19 CONTINUED BY MS. TAMARA MCCAFFREY:

20 MS. TAMARA MCCAFFREY: So even if you
21 have this twelve (12) or more period approach, does that
22 eliminate the need for a coincident peak allocator?

23 MR. PATRICK BOWMAN: I can deal with that
24 one. No, it doesn't eliminate the need for a coincident
25 peak allocator.

1 Coincident peak allocation of generation
2 costs is -- is still valid for some portion of the
3 generation costs. And I say that based on the same type
4 of cost of service considerations that I outlined
5 earlier, based on -- on first principles of what drives
6 costs on the system as well as practice in other
7 jurisdictions.

8 Coincident peak is clearly a cost driver
9 on the system. Manitoba Hydro plans its system to meet
10 both energy and coincident peak. We heard it in
11 reference to the system planning criteria that was set
12 out by Mr. Surminski and Mr. Cormie.

13 We heard it in reference to making
14 investment in the system to be able to ensure it can meet
15 the system coincident peak. And certainly a fair amount
16 of dollars are spent on various parts of the system to be
17 able to deal with that.

18 And -- the key point here is that weighted
19 marginal cost periods, twelve (12) weighted periods or
20 four (4) weighted periods, is all about the relative
21 value of energy over -- over relatively long periods.
22 It's an entirely different cost driver and planning
23 factor for a utility than making sure its system can meet
24 the peak when it's minus forty-five (-45) out and -- and
25 everyone has got their TV's on and -- and cooking their

1 Christmas turkey, or whatever it is that leads to that
2 coincidence.

3 In those situations the costs that are
4 incurred and the -- the expectations of service to
5 customers goes way beyond the simple economic calculation
6 of -- of weighted average energy costs in various
7 periods.

8 Even in a system planning context, you
9 don't think, when you're talking about reliability
10 investments, you don't talk in terms of the value of
11 energy on markets at that point in time. There's a whole
12 different set of -- of utility planning criteria which --
13 I've mentioned I was involved in -- in a hearing on this
14 matter recently and -- and involved in preparing a
15 resource plan for -- for Yukon that's being filed next
16 week on these matters -- and the amounts a utility will
17 spend to make sure it doesn't have outages and can meet
18 the peak are -- are way beyond anything it will spend to
19 simply capture some bit pricier markets at certain times
20 of the year. The magnitudes are completely different.

21 There's a whole area of practice on cost
22 of unserved energy and what people are willing to pay to
23 avoid outages. And there's a lot of -- a lot of time and
24 energy and money that goes into it. We've even heard
25 talk of in the 2004 GRA Hydro planning on bringing a

1 third bipole into service solely for liability reasons,
2 even if it doesn't develop new plants. That's the kind
3 of spending that goes with -- with making sure the system
4 can survive the winter.

5 With the existing two (2) bipoles we --
6 they can survive the summer. That's happened. A
7 windstorm takes them both down and the system survives.
8 This is -- this is talking about something beyond that.

9 So marginal energy is improvement on an
10 energy allocator, it's -- it's not capturing the same
11 cost drivers related to coincident peak.

12 MS. TAMARA MCCAFFREY: Thank you, sir.

13 With respect to Attachment C, that's the
14 portion that deals with rate design.

15 Mr. McLaren, do you have anything you wish
16 to add or comment on with respect to that piece of your
17 evidence?

18 MR. ANDREW MCLAREN: Just briefly. This
19 attachment looked at rate design criteria and some rate
20 design from other jurisdictions. And there's certainly
21 been a lot of discussion on this topic. And I think the
22 -- the issues have been well noted and well described by
23 other witnesses before this Commission.

24 We would just note that we acknowledge for
25 the record that these are not simple things to undertake

1 to develop, but they can be improvements to the system.
2 And we would note that we think that consultation with
3 customers in advance of them certainly can help simplify
4 the process.

5 MS. TAMARA MCCAFFREY: Thank you.

6 Mr. Williams asked about various proposals
7 to weight parts of the cost of service study to reflect
8 the range of water flow conditions possible.

9 Mr. Bowman, do you have any comment on
10 that?

11 MR. PATRICK BOWMAN: Yes. I would not
12 recommend weighting parts of the cost of service study to
13 reflect the variation in water flow component. The
14 reason is because as a cost allocation and analytical
15 tool the cost of service study should be internally
16 consistent.

17 When the revenue requirements that are
18 coming into the cost of service study are based on median
19 conditions the remainder of the cost of service study
20 would similarly want to reflect median conditions to
21 ensure internal consistency.

22 It's -- it's not coherent to mix drought
23 conditions in parts of the cost of service study with --
24 with average conditions in others.

25 MS. TAMARA MCCAFFREY: Would you like to

1 treat the Board to your views with respect to the merits
2 of an export class?

3 MR. ROBERT MAYER: Be careful, in light
4 of the fact that it was our idea.

5 MR. PATRICK BOWMAN: Yes. In regards to
6 an export class in the cost of service and the matters
7 before the Board in this hearing we have not taken a
8 position in our evidence.

9 We are relatively indifferent about
10 whether there is an export class in the cost of service
11 study and the concerns would arise as to what purpose it
12 is serving and what it is to be used for. And I think in
13 that regard we echo concerns of others.

14 But the point is it -- it adds a
15 complication into the study in terms of an additional
16 exercise but the point is not the same as the point for
17 other customer classes which is to set rates.

18 The point -- you don't set the rates for
19 your exports based on your export class. It's also not
20 to determine what projects to build or when to make a
21 sale versus not make a sale.

22 So we would want to be very clear that
23 regardless of how one does an export class it's not for
24 those purposes. There are different analytical tools for
25 those purposes.

1 The other comment we would make is that
2 none of the export classes that are on the table today,
3 Hydro's proposal or NERA's proposal, are suitable for
4 dealing with the threshold issue that we talked about
5 earlier and I think I've been through that.

6 The point there is that in -- in assessing
7 the level of export revenues, ensuring they cover their
8 costs -- embedded costs is not the right test. In
9 regards to an export class as they're proposed, in our
10 view NERA's -- NERA's proposal -- original proposal
11 reflects better Hydro's system than the -- Hydro's more
12 recent proposal.

13 We would say Hydro's proposal is -- is
14 focussed on this -- this premise of -- of opportunity
15 sales as the by-product, as the waste product, that only
16 -- only incurs variable costs and I went through earlier
17 why -- why we don't think that's valid.

18

19 CONTINUED BY MS. TAMARA MCCAFFREY:

20 MS. TAMARA MCCAFFREY: There's been a
21 fair bit of discussion, particularly with Mr. Warden,
22 about reserve funds. Do you agree, sir, that there's no
23 basis to consider any form of reserves beyond retained
24 earnings?

25 MR. PATRICK BOWMAN: No, we don't agree.

1 But I would want to be sure to note that anything that
2 we've put in our evidence doesn't hinge on which way the
3 Board determines on this issue.

4 Regardless as to whether reserves are
5 status quo reserves or whether a better approach is
6 sought, the cost of service methodology is not in any way
7 impacted. This is an issue that is, in part, somewhat
8 outside of the proceeding, it's more of a revenue
9 requirement related issue.

10 But even if the -- the -- any excess
11 determined to be available is used to pay down debt or --
12 or to build up the reserves that are there now that's --
13 that's an improvement as opposed to paying it back to a
14 distribution system to which it bears no link.

15 Just specifically on Mr. Warden's comments
16 though, we've made the point before that retained
17 earnings, in our view, is a poor tool to use to stabilize
18 the reserves that Hydro has to deal with.

19 Back in -- back in the late 1980's Hydro
20 did not report these amounts as retained earnings, it
21 actually called them rate stabilization reserves on its
22 financial statements.

23 In fact, at one point it had two (2)
24 reserves a general and contingency reserve and a rate
25 stabilization reserve. Over time those evolved into a

1 language of one (1) reserve, retained earnings and -- and
2 now often getting referred to as equity or even
3 shareholders' equity and that's a -- that's an evolution
4 that we would say is inconsistent with the premise on
5 which one sets aside reserves.

6 The second thing I would say is that I'm
7 not an accountant, I do work with a lot of accountants to
8 help them reflect the impact of regulatory decisions on
9 their financial statements.

10 And there are quite broad areas within --
11 within GAP to recognize regulatory assets and
12 liabilities. And if a regulator so directs the utility
13 is to put aside funds that need to be available at future
14 periods, the utilities have the opportunities to
15 recognize those as regulatory liabilities that are
16 different than retained earnings.

17 And I won't go further into that, but I do
18 note that even in -- for example the Ontario Energy's
19 Boards uniform system of accounts for its utilities and
20 the US Federal Energy Regulatory Commission uniform
21 system of accounts, there's a category for regulatory
22 liabilities based on the actions of the regulator.

23 And those are not, as I stated, not
24 retained earnings.

25 And finally, every other utility that

1 we've dealt with who has hydraulic generation in a
2 regulated system, has found ways to establish rate
3 stabilization provisions outside of retained earnings.

4 At a minimum to protect them from the
5 concept as being different than shareholders equity, but
6 also to reflect the unique characteristics of their
7 systems. And they're all -- they're all quite different
8 but they're all meant to deal with stabilizing the
9 hydraulic output of the utility in terms of the setting
10 of rates.

11 And I think this also reflected in the
12 PUB's decisions from 2003 and 2004 and I even jotted down
13 some quotes where the Board was talking about Hydro
14 developing a policy to identify a reserve provision
15 amount. That was in PUB 7/03, including rules on which
16 can be drawn down.

17 And then in 101/04, again comments about
18 internally restricting retained earnings as a form of
19 self insurance reserve. So it's not -- it's not a new
20 concept, it's just -- it's different than what's there
21 right now, as something between a rate stabilization fund
22 and a shareholder's equity.

23 MS. TAMARA MCCAFFREY: Thank you, Mr.
24 Bowman. Just briefly, we have had some talk about
25 certain letters back and forth between Manitoba Hydro and

1 certain MIPUG customers.

2 Do you have any concerns as a consultant
3 working in the regulatory environment, such as this, with
4 regards to what you've seen in those letters? Or is
5 there anything you'd like to comment on at this time?

6 MR. ANDREW MCLAREN: Well, I can't say
7 much since there's not specific proposals. And Mr.
8 Turner hasn't had his consultation with Mr. Brennan to
9 bring us any more details. So the premises though seems
10 to be that higher rates -- would be that one (1) time
11 rates or ongoing rates would want to be imposed on new
12 industrials.

13 We haven't heard if comments have extended
14 to say new residences and we're not even sure whether
15 it's all new industries or just certain new industries or
16 certain sectors or certain types of customers.

17 That level of detail isn't there. All of
18 those though, would raise concerns for us in terms of
19 discriminatory rates between the existing versus new
20 customers, between different classes of customers and
21 perhaps between different industries.

22 We'd also say though, generally it
23 reflects what seems to be an inconsistency between a
24 utility whose looking to find ways to develop some new
25 northern generation and to purchase some new wind

1 generation in the south, at the same time as it has tie-
2 line constraints with getting that power to market.

3 There seems to be a substantial
4 opportunity here to look for a mutual development.
5 Developing load in Manitoba to also be able to develop
6 the projects and have some -- have some consistency
7 between the two (2) concepts, rather than this apparent
8 inconsistency, to look for the opportunities that are
9 involved there.

10 THE CHAIRPERSON: Mr. Bowman, you don't
11 see Hydro's argument about displacing export sales at
12 higher unit price?

13 MR. PATRICK BOWMAN: Absolutely, Mr.
14 Chairman that -- the mathematics behind that argument
15 over the short terms are sound.

16 A kilowatt hour flowing to the export
17 market is at this point, securing greater revenues in a
18 kilowatt hour flowing in Manitoba to industrial
19 customers.

20 The key point though, is that from our
21 view is that outside of regulatory issues that are raised
22 or corporate objective issues that are raised by that, is
23 that that's a very short term focus.

24 The assets that are put in place today,
25 that were built to serve loads on a developing system

1 that are now our low cost resources that we want to sit
2 here and talk about how to deal with the excesses or
3 thresholds and all that sort of thing, those are there
4 because the system was able to be developed.

5 And it's a substantial change to move from
6 that to a bar the door philosophy that says, I don't want
7 -- I don't want the next guy in the door because he's
8 going to take away what we've got developed.

9 This is the opportunity to put in place
10 the resources that will be the -- the low cost resources
11 the next time this is debated a number of years from now.

12 So over a long-term perspective -- and
13 we've certainly seen this in spades in small systems in
14 the North -- utilities that are able to develop the load
15 to be able to put in place low cost resources are able to
16 maintain their -- their rates lower over the long term,
17 are able to have hydro assets as opposed to other types
18 of -- of systems that are put in place slowly over time,
19 and -- and ultimately, I think, will reflect on the good
20 decisions for Manitoba.

21 It's just that over the short-term we're
22 dealing with the mathematical gap.

23 THE CHAIRPERSON: So you wouldn't advise
24 Manitoba Hydro to be concerned about Mr. Lazar's concerns
25 with respect to aluminum smelter or something of that

1 nature?

2 MR. PATRICK BOWMAN: Well, this is
3 certainly something we dealt with quite a bit in -- in
4 one (1) of our interrogatory responses about -- about
5 aluminum smelters.

6 I -- I would not advise Manitoba Hydro to
7 be concerned about Mr. Lazar's proposals with aluminum
8 smelters. Were one concerned about it, we -- one would
9 want to critically analyse it and see to what extent it
10 is a -- a threat or indeed a real threat.

11 The type of situation Mr. Lazar is talking
12 about, 500 megawatts of aluminum, is -- would be an
13 enormous load in Manitoba. We're not talking about
14 industrial customers anywhere near that type of scale
15 today.

16 In jurisdictions that are dealing with
17 those type of loads, like Quebec and BC, who by the way
18 are actually arguing over who's going to get the next
19 one, not who's going to bar them out, Quebec in
20 particular has -- has rules that say it's not an
21 automatic given obligation to serve loads above a certain
22 level of megawatts. I think it's above two hundred
23 (200), it's in -- it's in our interrogatory at some
24 point.

25 So there's -- there's room for a fair bit

1 of discussion. And I think the point of individual
2 discussions with a customer of that magnitude would be --
3 would be expected.

4 But more so, a load of that side that's --
5 that's trolling for low rates would probably recognize
6 that a Hydro Quebec system may have room for them. A
7 Manitoba Hydro system, a 500 megawatt load would be
8 effectively soiling its own nest. The low rates that
9 it's trying to come here to capture wouldn't necessarily
10 be low rates, were it to arrive.

11 But my final comment is that there was a
12 recent review in Quebec before the Quebec Regie -- we
13 didn't participate in it but we -- we've got the document
14 and it's filed with one of our IR's -- where the
15 Government asked the Regie to provide it with instruction
16 -- advice on large new industrial customers and what it
17 should do about them.

18 And the Regie issued -- held a hearing,
19 issued a -- an advice letter to the Government that
20 effectively said, These are important public policy
21 considerations, You should think about a bunch of things
22 and effectively declined to say, we should have them or
23 not have them.

24 But in doing so it also reviewed evidence
25 that said that the median rate paid for aluminum smelters

1 at this point in time -- I can find it but it's -- it's
2 something like two point four (2.4) cents per kilowatt
3 hour Canadian.

4 In other words, when we're talking about
5 three (3) cent industrial rates, it's incorrect to say
6 Manitoba is the bottom of barrel that's someone is
7 trolling for. In fact, we wouldn't even be in the bottom
8 half in terms of what aluminum smelters are looking the
9 world over for.

10 So in -- in light of all of that, I think
11 that there's a -- a good reason for calm compared to --
12 compared to, you know, getting excited about -- about the
13 aluminum smelter --

14 MR. ROBERT MAYER: Mr. Bowman --

15 MR. PATRICK BOWMAN: -- showing up on our
16 doorstep.

17 MR. ROBERT MAYER: -- that's all very
18 nice, except that we've had a proposal from an aluminum
19 company in the past. It was conditional upon them owning
20 50 percent of a major generating station and several
21 other conditions. But obviously at some point in time
22 somebody thought we looked like a good catch. So I don't
23 know how you can dismiss Mr. Lazar's concerns out of
24 hand.

25 MR. PATRICK BOWMAN: Mr. Mayer, it's not

1 dismissed out of hand. We -- we've more than had
2 proposals for an aluminum smelter. We've filed some
3 documents from the 80's that show that we actually sought
4 aluminum smelters, set up agencies to go find aluminum
5 smelters and bring them here, which ultimately were not
6 successful.

7 The -- the point that you raise in your
8 comment, though, is we're not talking about having
9 unlimited access to today's industrial rates as a
10 framework for supplying aluminum smelter who shows up.
11 Even your comment noted that -- that we're talking about
12 finding ways to put in place new assets, determining a
13 way that -- to share in the costs of those, plenty of
14 time and room to figure out how to deal with that as
15 opposed to the -- the type of situation that somehow
16 tomorrow you wake up and find in your backyard an
17 aluminum smelter that somehow is -- is driving your rates
18 up.

19 MS. TAMARA MCCAFFREY: Just following up
20 on -- on the comments about new industrial load, is there
21 a way that these loads can actually assist or enhance the
22 potential for export market? And I'm thinking in terms
23 of tie-line space?

24 MR. PATRICK BOWMAN: Well, that -- that
25 was just my comment about if one is seeking to develop

1 new northern generation at a time when tie-lines are
2 limited by the existing constraints and the ability to
3 sell peak power there is a mutual opportunity with
4 returns -- in terms of developing loads that allow us to
5 use some power domestically and value add to it and also
6 freeing up room on the tie-lines so that that generation
7 can be advanced and ultimately at some point down -- down
8 the road having -- having future generations be thankful
9 for it the way I think they probably will be about --
10 about something like the Wuskwatim project.

11 MS. TAMARA MCCAFFREY: So the growing
12 domestic load isn't necessarily a bad thing even with
13 respect to exports?

14 MR. PATRICK BOWMAN: I -- I have a hard
15 time with a value judgment of good or bad growing load
16 wearing an analyst hat -- wearing the analyst hat. The
17 load is the load to be served and the rates are the rates
18 that are put in place to serve that load by the
19 regulator.

20 If one was seeking to be an advocate for
21 new development though, as I understand Hydro's proposals
22 outside of this room in other forums to be, it would seem
23 to be inconsistent to be trying to find ways to reduce
24 Manitoba load rather than grow the load to allow it to
25 get on with that development.

1 MS. TAMARA MCCAFFREY: Thank you, sir.
2 Just one final question, there has been a -- a suggestion
3 that one of the weaknesses in stepped rate structure is
4 that it doesn't impact industrial expansion decisions.

5 We've heard that -- I think we've seen
6 some of that in Hydro's evidence, and particularly in the
7 rebuttal evidence; would you care to comment on that?

8 MR. PATRICK BOWMAN: Well, just briefly,
9 it's correct. Stepped rates do not impact the total bill
10 that is going to be paid by a customer of a given size
11 every month. You call that a total income effect.

12 If a -- if a utility is able to offer
13 overall electricity at an attractive price to an
14 industrial customer their total income effect can be a
15 benefit.

16 While you're doing that, though, the key
17 is to figure out how to also send them an efficient price
18 signal so that at the margins they're not wasteful or
19 they find ways to conserve or to capture benefits from --
20 from reduced consumption at the same level of output;
21 that is entirely different than trying to find an adverse
22 impact total income effect on the customer so that the
23 person who's arriving in the jurisdiction is paying the -
24 - the higher overall -- all bills.

25 MS. TAMARA MCCAFFREY: Thank you very

1 much. Mr. Bowman and Mr. McLaren, it's my pleasure now
2 to turn these gentlemen over for any questions in cross-
3 examination.

4 THE CHAIRPERSON: Thank you. Thank you,
5 gentleman. Thank you, Ms. McCaffrey.

6 I am just going to poll the group right
7 now because I don't think there's much point in moving to
8 another Intervenor right before lunch but I'll just find
9 out, first of all, Professor Miller, do you have a lot
10 for this -- for these two (2) witnesses?

11 DR. PETER MILLER: Just a little.

12 THE CHAIRPERSON: Okay.

13 Well, perhaps you could -- I'm just
14 looking; are you all right, Mr. Williams, if Professor
15 Miller goes ahead of you?

16 MR. BYRON WILLIAMS: I would always defer
17 to Professor Miller.

18 THE CHAIRPERSON: You should write that
19 in your book, Professor Miller.

20 DR. PETER MILLER: I'll remember that.
21 I'll call it in sometime.

22 THE CHAIRPERSON: Why don't you start
23 then, Professor Miller and if we determine that you have
24 more questions than you think you have at first thing, we
25 will --

1 DR. PETER MILLER: All right. Basically,
2 I have one (1) -- one (1) question at this point and I
3 guess that's just one (1) question overall and I'm sure
4 others will ask the -- the other areas of -- of concern.

5

6 CROSS-EXAMINATION BY DR. PETER MILLER:

7 DR. PETER MILLER: You were just talking
8 about the aluminum smelter and how that's not a real
9 danger to Manitoba but isn't that essentially a surrogate
10 for a sodium chlorate expansion, which is a reality and
11 that's the reality that provoked the exchange of letters
12 and so on that have been cited.

13 And so I think the distinction -- I mean,
14 the distinction can be put in a couple of terms.

15 One (1) is electricity a feed stock or an
16 instrument in the production process. Another is what is
17 the ratio of economic benefits and in particular,
18 employment that's been discussed, to the amount of energy
19 consumed.

20 And when we look at the MIPUG examples of
21 100 million of electrical expenditures, we can also
22 interpret that of a 100 million of Manitoba subsidies
23 because they're paying about half the cost of the
24 generation.

25 So I guess, would you comment on those two

1 (2) points?

2 MR. PATRICK BOWMAN: I want to make sure
3 I have the two (2) right. Sodium chlorate as opposed to
4 aluminum was one (1) comment you made, if I have it,
5 that's the first one?

6 DR. PETER MILLER: Yes.

7 MR. PATRICK BOWMAN: And the second one
8 (1) was on employment benefits, is that correct?

9 DR. PETER MILLER: In relation to the
10 quantity of subsidized energy that is being received.

11

12 (BRIEF PAUSE)

13

14 MR. PATRICK BOWMAN: In regards to sodium
15 chlorate as opposed to aluminium in the context of the
16 discussion we are having the example Mr. Lazar was using
17 was of a 500 megawatt aluminium smelter. I noted that in
18 Quebec there are rate schedules for many, many years.

19 And by the way the letter and the decision
20 from the Quebec Regie is in response to TREE/MIPUG 1, if
21 we're looking for it. But in Quebec there is a provision
22 which ensure that Hydro Quebec, as best I can understand
23 it, Hydro Quebec does not have an obligation to serve
24 above 175 megawatt level for new loads.

25 All I was saying is that in Manitoba we're

1 not talking about the same context, at all. We don't
2 have loads in that size. There's certainly no 500
3 megawatt customer here today or sodium chlorate plants
4 talking about 500 megawatts.

5 And the ones that are here today to my
6 knowledge, would be within the 175 megawatts or very
7 close to it. And that's -- Mr. Turner's plant, noting
8 he's the largest in the world.

9 So, in terms of scale, I would make that
10 general comment. The second comment I would make though
11 is -- is that in terms of a regulated jurisdiction and
12 we're talking about Quebec here -- dealing with the Regie
13 as a regulated jurisdiction.

14 The key point that they effectively
15 declined to comment on or declined to take a position on,
16 relates to making determinations as to the value of the
17 customer's use of the power. Not a judgment as to which
18 use of power is better or less preferable and which
19 should be socially encouraged and which should be
20 discouraged.

21 Those are clearly, as noted in the Quebec
22 letter, public policy considerations that require balance
23 between type of factors you might note.

24 But within a regulated rate framework I
25 have not seen any jurisdiction and I wouldn't advise a

1 between what the -- the MIPUG members themselves say and
2 what you say in your brief?

3 MR. PATRICK BOWMAN: Yes. And I'll try
4 to make sure that I'm dealing with it as an utility
5 analyst as opposed to a historian, because it's not --
6 not my area of expertise in terms of history.

7 But power at cost tends to be a -- a
8 public policy framework that one sees arise in different
9 jurisdictions. It's -- you may find a hard time finding
10 it entrenched in the policy document of any particular --
11 particular legislation or regulation or something.

12 But the -- the framework at which utility
13 regulation is put in place is -- is that the -- the
14 residents of the jurisdiction, the Manitoban buying
15 power, would be able to receive their power at the cost
16 at which Manitoba Hydro could produce it, not at which
17 the -- the best price Manitoba Hydro could get on markets
18 and -- and not at which the -- the price that -- that
19 Cabinet would determine reasonable for any particular
20 customer.

21 That's a different framework that arises
22 in places like -- like Saskatchewan, where the Cabinet
23 sets the rates. They're slowly moving towards a more
24 cost of service based framework but for a long period of
25 time it was simply rates set by the Provincial

1 in the Act that says that but it -- it's based on
2 reviewing a lot of different jurisdictions and the way
3 they frame their -- their power system and their intended
4 design of rates. That would be the -- the short summary
5 of -- in reviewing Manitoba's history -- of the framework
6 that's intended to be there.

7 I hope that -- that deals with the -- the
8 framework you're talking about.

9 DR. PETER MILLER: Yes. Thank you. And
10 -- and maybe this will be my last.

11 It -- it seems to me that if we go with
12 that understanding of the power costs, the -- the new
13 export class -- and I realize you -- you disagree with
14 exactly how the accounting is done on that, but assuming
15 you could get an agreement on -- on how much of the cost
16 to assign to the export class and leaving the embedded
17 costs for the domestic classes -- if you want stable and
18 predictable rates and power at cost, and I think those go
19 together to some extent, then it would be on average,
20 what, a 28 percent rise from current rates to achieve
21 that, that is without an export subsidy going to rates.
22 You might have export subsidies going to other things but
23 not to -- to depressing the rates.

24 Would you comment on -- on whether that
25 would not be the stable predictable point that people

1 might agree on, no -- no rate subsidy, and -- and also
2 comment on whether that level of increment, obviously
3 over a long period of time, gradualism and all that,
4 would be a level that might discourage a -- an industry
5 that uses electricity as a feedstock as -- as opposed to
6 an instrument in a -- in a process?

7 MR. PATRICK BOWMAN: If it's okay, I'll
8 do it in two (2) steps. First, on the matter of the
9 relationship you set out without dealing with the
10 numbers. I think you have it reasonably close. What
11 we're effectively saying is that if you're -- if you're
12 going to deal with costs in a cost of service study,
13 those costs would be the costs incurred by the Utility
14 and the -- as offset by the revenues that it can derive
15 from markets related -- that link to those costs, not
16 apportioning it if it exists and bears no linkage.

17 The remainder, the excess, for lack of a -
18 - of an agreed terminology, but the excess would be
19 outside of -- of the rate framework in any given year.
20 It would not be an immediate part of setting -- setting
21 rates at that time.

22 And all other things being equal it would
23 mean that that excess not going back to rates would mean
24 rates would, at some period of time, be somewhat higher.
25 If that excess were being used to build up drought

1 reserve provisions or pay down debt, it may mean that
2 over time they're lower.

3 It should mean that over time they're
4 lower because at some point we're going to have a
5 drought. At some point we're going to have lower debt
6 than we would have and those are lower costs.

7 In regards to 28 percent and the export
8 class, I think we've noted quite clearly, we don't agree
9 with the export class as the framework one would want to
10 use or the approach one would want to take in determining
11 this level of threshold because it's fundamentally based
12 on embedded costs which -- service to exports is
13 fundamentally based on ongoing decisions.

14 So, I -- it -- ultimately the NERA export
15 class, and certainly Hydro's export class, would be --
16 would be lower than we would ultimately expect the
17 threshold to come out to be. But -- but yes, there would
18 be some level of short-term rate impact in order to
19 achieve that level where those revenues are not going
20 into a very short-term electrical power rate framework.

21 Your other comment though was, wouldn't
22 that solve our -- our issue -- or help with the issue of
23 -- of -- of -- of preventing aluminum smelters? I'm --
24 I'm -- if I'm paraphrasing correctly. I see you nodding.

25 And I would say at this point in time, no.

1 And the main reason is because the industrial rates that
2 we're talking about at -- at three (3) cents are well
3 above the costs that are currently measured. If one were
4 to adjust costs in the way I was talking about, the costs
5 would come up but it wouldn't necessarily mean those
6 rates would go up given that they're currently higher
7 than the -- than -- than the costs that are there.

8 So in terms of rate impact over time they
9 would be higher but there's certainly a fair period of
10 adjustment, it's taken twenty (20) years, certainly would
11 take a lot longer than this to have the rates reflecting
12 costs.

13 And, of course, on top of that all of the
14 things I talked about in terms of an aluminum smelter is,
15 sort of, soiling its own nest by -- by -- by bringing up
16 the rates and the fact that it doesn't compare to the
17 type of rates these -- these companies are talking about
18 elsewhere in the world.

19 Even though Manitoba Hydro may say it has
20 the lowest rates in the world, the evidence is that
21 companies of this type manage to secure power at lower
22 cost.

23 DR. PETER MILLER: Well, the sodium
24 chlorate though would be the alternative example?

25 MR. PATRICK BOWMAN: Yeah. I -- I

1 already dealt with that. They're -- they're aluminum,
2 sodium chlorate, forestry, mining companies that use a
3 lot of power would have similar impacts and similar
4 considerations within a -- within a cost of service
5 framework.

6 DR. PETER MILLER: Thank you.

7 THE CHAIRPERSON: Thank you, Professor
8 Miller. And it worked out quite nicely. So we'll return
9 back at 1:30 and Mr. Williams, you're up then. Sorry,
10 how about 1:15?

11

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

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

14

15 THE CHAIRPERSON: Okay, welcome back,
16 everyone. Before we turn matters over to Mr. Williams.

17 Mr. Peters...?

18 MR. BOB PETERS: Thank you, Mr. Chairman.

19 This morning Manitoba Hydro circulated responses to
20 Undertaking Number 4 and Undertaking Number 22. Those
21 have yet to be marked as exhibits and I'll turn it over
22 to My Friend, Ms. Ramage, to finalize that.

23 And if Ms. Ramage is in a position it may
24 also be helpful for the Board to learn the status of any
25 other outstanding undertakings just before we adjourn for

1 the weekend. She may have that information at this time.

2 MS. PATTI RAMAGE: Yes, twenty-two (22)
3 which is going around is Manitoba Hydro Undertaking
4 Number 4 which was the list of short-term opportunity
5 sales.

6

7 --- EXHIBIT NO. MH-22: List of short-term opportunity
8 sales

9

10 MS. PATTI RAMAGE: And just for the
11 record, twenty (20) is -- or what I'm proposing be
12 Exhibit 23 is Undertaking 20 which is the cost of
13 purchase power in excess of costs for imported power.

14

15 --- EXHIBIT NO. MH-23: Response to Undertaking 20

16

17 MS. PATTI RAMAGE: Ms. Fernandes and Ms.
18 Dorian are circulating the responses to Undertakings 21
19 and 22 and I'm suggesting twenty-one (21) be marked as
20 Exhibit 24 and that is providing the total cost of
21 purchase power and determining the percentage of power
22 purchase cost to serve domestic load and firm exports.

23

24 --- EXHIBIT NO. MH-24: Undertaking number 21.

25

1 THE CHAIRPERSON: We don't have this
2 here.

3 MS. PATTI RAMAGE: These are just being
4 distributed right now.

5 MS. TAMARA MCCAFFREY: Ms. Ramage, I'm
6 sorry, I have a Manitoba Hydro Undertaking number 22 as
7 being -- oh, okay. Thank you.

8 MS. PATTI RAMAGE: Number 22 is also just
9 being distributed right now, and I -- I don't know that
10 the Board has it itself. It is providing an explanation
11 as to why the relative difference between GS small RCC
12 and residential RCC narrows when comparing the post-
13 export allocation RCC's. That was in response to Mr.
14 Feldschmid.

15

16 (BRIEF PAUSE)

17

18 MS. PATTI RAMAGE: That's Exhibit number
19 25.

20

21 --- EXHIBIT NO. MH-25: Undertaking number 22.

22

23 THE CHAIRPERSON: Undertaking number 4
24 was Exhibit number...?

25 MS. PATTI RAMAGE: 22. Now, Mr. Peters

1 asked for an update and our records indicate that this
2 leaves us with only one (1) undertaking outstanding and
3 that is with respect to comparing the insurance
4 provisions between Manitoba, BC Hydro and Quebec Hydro.
5 And it's my understanding that we have the information.

6 What we don't have is the consent from
7 those utilities to release that information because it's
8 provided to our insurance people on a -- on a
9 confidential basis. So that's what we're working at
10 right now, is getting that.

11 THE CHAIRPERSON: That's quite
12 reasonable. Thank you. Just to review this, because
13 people got their various undertakings at different times.

14 Undertaking number 4 is Exhibit 22.
15 Undertaking number 20 is Exhibit 23. Undertaking number
16 21 is Exhibit 24. And Undertaking number 22 is Exhibit
17 25. Is that --

18 MS. PATTI RAMAGE: That's right.

19 THE CHAIRPERSON: Okay.

20 Is that it, Mr. Peters?

21 MR. BOB PETERS: Yes, it is. Thank you.

22 THE CHAIRPERSON: Thank you.

23 Mr. Williams...?

24

25 (BRIEF PAUSE)

1 CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

2 MR. BYRON WILLIAMS: Good afternoon, Mr.
3 Chairman and Members of the Board.

4 Good afternoon, Mr. McLaren, Mr. Bowman.

5 I just want to start in terms of your
6 retainer, and my understanding is that InterGroup was
7 retained to identify and evaluate issues arising from the
8 -- Hydro's filing with regards to its cost of service
9 application that are of interest to industrial customers,
10 taking into account normal regulatory review procedures
11 and principles appropriate for Canadian Crown owned
12 electric power utilities.

13 Is that right?

14 MR. PATRICK BOWMAN: Yes. That's what it
15 said in our evidence, I believe it's in Section 1, and
16 it's the -- it's basically the same retainer InterGroup
17 has had from MIPUG since MIPUG began intervening in these
18 hearings in the late 1980's.

19 MR. BYRON WILLIAMS: Mr. Bowman, you're
20 unduly defensive. I was just using it as a segue into --
21 perhaps at some later point in time you can -- you can
22 become defensive but just was just a clever segue that
23 didn't turn out quite so -- so quickly as I hoped.

24 In terms of comparing yourself to -- in
25 terms of comparatives in terms of Canadian Crown owned

1 electric power utilities, I'd suggest to you that given
2 their size, given their heavy reliance upon hydroelectric
3 power, and given the fact that they're both Crown owned
4 and also from time to time significant exporters, the two
5 (2) most comparable companies to Manitoba Hydro are
6 probably BC Hydro and Hydro Quebec.

7 Would you agree with that?

8 MR. PATRICK BOWMAN: Yes. Manitoba Hydro
9 has always been unique among those three (3) for a couple
10 of reasons.

11 Particularly today not all of Hydro
12 Quebec's operations are regulated, only the distribution
13 and transmission are.

14 And British Columbia has had, if it's fair
15 to say, inconsistent regulation over the years. It has
16 had long periods of time where it -- it hasn't been
17 actively under regulation and -- and good parts of the
18 regulatory framework have been dictated by special
19 policies as opposed to what we would normally think of as
20 a -- as a regulator's role.

21 But outside of that, those are -- those
22 are physically the two (2) that -- that we're normally
23 thinking about.

24 MR. BYRON WILLIAMS: So, just to
25 summarize your answer, and again that's a helpful segue,

1 they're the most comparable but there also are
2 significant differences; is that correct?

3 MR. PATRICK BOWMAN: Yes. Yes, that's
4 fair.

5 MR. BYRON WILLIAMS: And I wonder -- I'd
6 like to just explore with you a couple of minutes some of
7 those similarities and differences in terms of the
8 approach to dividends to the -- to the respective
9 provincial owners; the size of revenues and a number of
10 other factors.

11 So as I understand it a key difference
12 between Hydro Quebec and -- and BC Hydro as opposed to
13 Manitoba Hydro is that for BC Hydro and Hydro Quebec
14 their dividends are established either by legislation or
15 by other government directive; is that right, sir?

16 MR. PATRICK BOWMAN: I'll -- I'll answer
17 as best I can. I don't -- I don't work in Quebec and
18 I've only had limited involvement in BC although we're --
19 we routinely review both jurisdictions as -- as insight
20 into the jurisdictions that we work.

21 In -- I -- I noted that those two (2) were
22 similar in respect of being Crown owned large hydro-based
23 with substantial exports. They're not similar on the
24 basis of dividends which is -- which is, I think, where -
25 - your point.

1 When we've reviewed charges to the Crown
2 or payments to the Crown in the past in this forum the
3 point has been made that each of them pays dividends
4 based on rules that are set by a -- by the government and
5 that those dividends in each case are linked, in part, to
6 the risks of the utility and -- and things like water
7 flows or net income in a particular year.

8 MR. BYRON WILLIAMS: Again, that's
9 helpful, Mr. Bowman. And just to be clear, you've set
10 out some discussion about this, we don't need to turn
11 there, but in Attachment H of your evidence so you have
12 devoted some attention to this issue?

13 MR. PATRICK BOWMAN: Yeah, in terms of
14 the level of government charges that's dealt with there.
15 In terms of the statutory framework for the payments it's
16 not -- it's not something we've spent a lot of time
17 reviewing.

18 There's some -- there is some -- some
19 quotes there from the relevant special directives in BC
20 in particular, I believe. But the public policy
21 framework that was behind those directives or what
22 they're intended to achieve isn't something we spent a
23 lot of time on.

24 MR. BYRON WILLIAMS: That's fair enough.
25 And I just want to, at a very high level, follow through

1 in terms of what's set out. And as I understand BC
2 Hydro's policy framework for the payment of dividends is
3 set out in special directives that are allowed under the
4 specific BC legislation; correct?

5 MR. PATRICK BOWMAN: Yes.

6 MR. BYRON WILLIAMS: And for Hydro Quebec
7 those -- the -- their guidance flows from Section 15.1 of
8 the Hydro Quebec Act which you reproduce in your
9 evidence; is that right?

10 MR. PATRICK BOWMAN: Yes, that's
11 reproduced at page 27.

12 MR. BYRON WILLIAMS: And by contrast
13 Manitoba Hydro, and I guess we can leave out the special
14 payments of '03 and '04, apart from that, there's no
15 express statutory authority or any directive for payment
16 of dividends to the province; is that correct, sir?

17 MR. PATRICK BOWMAN: I can answer from
18 the perspective of an analyst reviewing a regulatory
19 framework that we don't see that. I think there's a
20 legal aspect to the question and I can't comment on it.

21 MR. BYRON WILLIAMS: Fair enough. And
22 just in terms of you did mention that you had done a
23 comparison of the payments to the provinces by these
24 various Crown utilities and I believe that appears at
25 page 29 of your evidence in Table A1; do you have that,

1 sir?

2 MR. PATRICK BOWMAN: Yes.

3 MR. BYRON WILLIAMS: Now, before we go to
4 the range of dividends that are actually paid, I just
5 wanted to get a sense of the relative size of the
6 revenues of those corporations and I understand that they
7 bounce around from year to year.

8 But if we look at 2004 you'll agree with
9 me that -- the year ending 2004 you'll agree with me that
10 the electric revenue for Manitoba Hydro was in the range
11 of about 1.3 billion; is that correct, sir?

12 MR. PATRICK BOWMAN: Yes, that's the
13 number there.

14 MR. BYRON WILLIAMS: And for BC Hydro
15 it's in the range of 3.4 billion?

16 MR. PATRICK BOWMAN: Yes.

17 MR. BYRON WILLIAMS: And for Hydro Quebec
18 in the range of about 10.7 billion in that year?

19 MR. PATRICK BOWMAN: Yes.

20 MR. BYRON WILLIAMS: And you've also
21 summarized a variety of payments that are made to the
22 provincial utilities and you've tried to capture them --
23 the payments to government as a percent of electric
24 revenues; have you not?

25 MR. PATRICK BOWMAN: Yes.

1 MR. BYRON WILLIAMS: And if I look for
2 the year 2002, on a percentage basis, you'll agree with
3 me that the payments to government as a percentage of
4 electric revenues for Manitoba Hydro, BC Hydro and Hydro
5 Quebec were pretty close, in the range of 11.5 to 11.8
6 percent; is that right, sir?

7 MR. PATRICK BOWMAN: Yes.

8 MR. BYRON WILLIAMS: And, again, the next
9 year, 2003, being the year of the special payment to the
10 province, you see Manitoba Hydro was the leader of the
11 pack at 32.1 percent; is that right?

12 MR. PATRICK BOWMAN: Yes, absent the
13 special payment it would have been about the bottom of
14 the pack, but it was the leader of the pack that year.

15 MR. BYRON WILLIAMS: And if we go to
16 2004, which is the last full year for which you produce
17 data, you'd agree with me that we have a range from BC
18 Hydro, I believe, in the range of 13.7 to Hydro Quebec in
19 the range of 20 percent with Manitoba Hydro being
20 somewhere in the middle; is that right, sir?

21 MR. PATRICK BOWMAN: Yes. BC Hydro's
22 dividends were down substantially that year.

23 MR. BYRON WILLIAMS: And the conclusion
24 you've drawn for this, and I believe it appears on the
25 next page of this -- of this evidence, is that Manitoba

1 Hydro's payments to the province expressed as a
2 percentage of total electricity revenues is well within
3 the range of the two (2) other utilities; would you agree
4 with that?

5 MR. PATRICK BOWMAN: Yes, that's the
6 comment I made in my direct as well. Yes.

7 MR. BYRON WILLIAMS: And I believe you
8 just made the comment a couple of seconds ago, you also
9 noted the distinction in that dividend payments to BC
10 Hydro and Hydro Quebec are tied, at least in part, to the
11 performance of the utilities; is that correct?

12 MR. PATRICK BOWMAN: Yes.

13 MR. BYRON WILLIAMS: And in the case of
14 Manitoba Hydro those payments are not so linked; is that
15 right?

16 MR. PATRICK BOWMAN: Not entirely. Water
17 rental payments, it would depend on the water flows in
18 the year and the amount of power generated. But the --
19 and -- from my recollection water rental payments are the
20 -- are the largest component in most years.

21 But the other components, as I understand
22 it, are not linked to the performance of the utility.

23

24

(BRIEF PAUSE)

25

1 MR. BYRON WILLIAMS: Mr. Bowman, you had
2 some discussion, both with Mr. Mayer -- or Vice Chairman
3 Mayer and Dr. Miller on this subject this morning and I
4 don't want to step on their toes but I do want to follow
5 up on some of the discussion.

6 In your evidence you expressed the view
7 that, and you did this again with Dr. Miller this
8 morning, that Manitoba Electric -- electricity prices are
9 based on the costs required to operate the public power
10 electricity system put in place in past years; is that
11 correct?

12 MR. PATRICK BOWMAN: Yes.

13 MR. BYRON WILLIAMS: And in your view
14 these prices reflect what you've described as underline
15 heritage resources developed and paid for by electricity
16 consumers who took on the costs and risks related to
17 major generation and transmission; is that right?

18 MR. PATRICK BOWMAN: Yes, that actually
19 sounds like a quote, but, yes.

20 MR. BYRON WILLIAMS: It's easier that
21 way. I'm not going to ask you to elaborate just yet,
22 although I'll give you an opportunity in a second.
23 You're aware that some parties in this proceeding have
24 described a portion of the revenues garnered from the
25 export market as a windfall; are you aware of that choice

1 of words?

2 MR. PATRICK BOWMAN: Yes, I've heard the
3 term "windfall", at times in the past when people use the
4 term "gravy". I think generally the same concept. Yes.

5 MR. BYRON WILLIAMS: And you're also
6 aware that the question was -- and, in fact, a question
7 was posed to you, but some parties, such as TREE, may
8 argue that -- that really that Manitoba electricity
9 consumers didn't invest their own power to create this
10 power system and that their risks are those of any other
11 purchaser of a product who relied upon a purchased
12 product which may or may not fail or become more costly
13 over time; do you recall that discussion at all?

14 MR. PATRICK BOWMAN: I recall an
15 Interrogatory from TREE that, I think, asked that exact
16 question. I don't have the --

17 MR. BYRON WILLIAMS: The reference is
18 number 4.

19 MR. PATRICK BOWMAN: Okay, sorry, TREE
20 Number 4, yes. And that that was -- we -- we responded
21 in more detail in that response but, yes, I recall it.

22 MR. BYRON WILLIAMS: And you took issue
23 with that suggestion, of course, because you said that
24 ratepayers are not at all analogous to any purchaser of a
25 product who will merely switch suppliers in a competitive

1 marketplace; is that correct?

2 MR. PATRICK BOWMAN: Well, again, it --
3 it sounds like a quote but I think that's a fundamental
4 part of a regulatory framework is you have a -- these
5 ratepayers can't switch suppliers so we have a utility
6 board to -- to deal with the -- that's why we have
7 regulation. Yes.

8 MR. BYRON WILLIAMS: And, in fact, you'd
9 argue that they bear collectively the risk of success or
10 failure in terms of these major investments in northern
11 hydro electric generating and transmission; would you
12 agree with that?

13 MR. PATRICK BOWMAN: Well, I'd agree with
14 it although it's not like we have a lot of evidence of
15 that in Manitoba. We haven't had a failure of the
16 northern generating system but I think it's underlined by
17 the discussion with Mr. Harper about the debt retirement
18 charge in Ontario where their ratepayers did -- did
19 ultimately bear the risk for the power system put in
20 place by a Crown utility to -- to serve them with power.

21 MR. BYRON WILLIAMS: And in that case the
22 charge was not a -- in terms of the debt retirement was
23 not a tax levy it was a charge for -- on electrical
24 rates; is that correct, sir?

25 MR. PATRICK BOWMAN: Yes. On a -- as Mr.

1 Harper indicated on an equal cents per kilowatt hour
2 basis. So it was a charge on -- on electrical rates but
3 particularly electrical rates at generation -- generation
4 rates.

5 MR. BYRON WILLIAMS: And just going back
6 to the discussion with Dr. Miller this morning I -- I
7 suspect you'd also argue that when you're looking at
8 who's entitled to any excess revenues that may be
9 identified, we have to understand that these major hydro
10 electric projects were entered into in the province of
11 Manitoba on the understanding that they were to ensure
12 both the future energy and capacity security of the
13 province but also to benefit ratepayers; is that correct?

14 MR. PATRICK BOWMAN: Yes, I agree with
15 the framework. I want to be a bit careful with the
16 terminology. We had a bit of concern about the -- the
17 term "excess" and it perhaps being linked to windfall or
18 gravy or surplus and a bunch of other words that could be
19 thrown around.

20 Just to keep a distinction, we've tended
21 to use the term "excess" wearing an analyst's hat within
22 the four (4) walls of the cost of service study. There's
23 an -- the case being made -- we see it argued in Hydro's
24 evidence is that there's an excess of revenues that can
25 be dealt with under first principles in the cost of

1 service study.

2 It doesn't necessarily mean that there's a
3 surplus to the -- to the electricity system or - or that
4 -- or Manitoba Hydro's finances; that's the point about
5 the current level of reserves and -- and their capability
6 to make payments to the government compared to BC Hydro
7 or Hydro Quebec.

8 MR. BYRON WILLIAMS: I appreciate your
9 caution and I think my question might have been lost in
10 your caution. But just -- just in taking that caveat
11 into account, your point is that you have to understand
12 that -- when we are talking of any excess we have to
13 understand the fundamental premises upon which these
14 major projects were entered into which was for the
15 benefit of Manitoba ratepayers and with the assurance
16 that those benefits would be returned to them in some
17 form or the other in terms of secure supply and
18 affordable rates?

19 MR. PATRICK BOWMAN: Yes, absolutely.
20 And that -- it echos my comments earlier that the -- the
21 analyst's job includes considering the public policy
22 framework in the jurisdiction.

23 So, if there's a public policy framework
24 for it being levelized rates, that gets reflected in the
25 analyst's tool because there's public policy framework

1 for the ability of heritage resources to generate
2 revenues to -- to benefit electricity ratepayers, that
3 also gets reflected in the consideration.

4 MR. BYRON WILLIAMS: And you -- you refer
5 to the policy within the jurisdiction and you might
6 contrast the service of cost framework in Manitoba with
7 frameworks in other jurisdictions, such as Newfoundland,
8 where my understanding is that Churchill Falls was
9 entered into with -- and -- by the government of
10 Newfoundland and specifically directed through
11 legislation government policy to make profits and pay
12 dividends and you'd distinguish that from the Manitoba
13 experience, again, would you?

14 MR. PATRICK BOWMAN: Well, I -- I'd
15 distinguish it distinctly from the -- yes, the Manitoba
16 experience and up to the current and the -- the premise
17 for -- for building Wuskwatim, let's say. People aren't
18 talking about we'll build Wuskwatim so that -- that the
19 government can get a good return.

20 It's we'll build Wuskwatim to help keep
21 rates down. I've heard that a number of times.

22 MR. BYRON WILLIAMS: Thank you. And I
23 won't belabour this point much longer, but I will for
24 just a couple of seconds more.

25 And I want to look at this idea of a

1 windfall or gravy just a bit more, especially as it might
2 relate to the so-called entitlement of a third party to
3 any carefully caveated excess revenues.

4 I wonder if you'd agree with me that --
5 that if we try and understand where the quantum of export
6 revenues come -- comes, and I'm going to suggest to you
7 there's three (3) factors, but one (1) factor in terms of
8 the actual quantum of revenues in any particular year is
9 Manitoba Hydro's investment in -- in facilities that will
10 facilitate or increase the opportunity for exports --
11 exports.

12 Would you agree with that?

13 MR. PATRICK BOWMAN: I'm sorry, you're
14 going to have to repeat the question.

15 MR. BYRON WILLIAMS: It was inelegantly
16 asked. Well, maybe I'll ask you the whole question as
17 one.

18 If we -- if we want to look at where the -
19 - the export revenues come from in a particular year,
20 they're enabled in part by Manitoba Hydro's investment in
21 facilities. They're enabled in part in a particular year
22 by the existence of a surplus of energy and capacity on
23 Manitoba Hydro's system. And the magnitude of those
24 revenues is also enabled in part by market conditions
25 elsewhere or it's reflective of market conditions

1 elsewhere.

2 Would you agree with that?

3 MR. PATRICK BOWMAN: I would agree that
4 those are all factors in determining -- in ultimately
5 driving the quantum of export revenues if -- they are
6 indeed three (3) factors.

7 MR. BYRON WILLIAMS: And the ability of a
8 skilled witness is to carefully and properly rephrase
9 inarticulate questions, Mr. Bowman. So I thank you for
10 that. And I thank you for that.

11 Just in terms of the second factor that I
12 mentioned, which relates to the magnitude of -- of
13 revenues in each year being surplus in energy and
14 capacity, you agree with me that to a certain degree this
15 -- that's a function of water flows and cannot be
16 guaranteed. And, indeed, in low periods export revenues
17 will drop, in low flow periods.

18 Would you agree with that?

19 MR. PATRICK BOWMAN: Yes. This was --
20 this was actually the one I had just a bit of the most
21 trouble with agreeing because it's a factor but it's not
22 a determining factor. And Mr. Harper made the point BC
23 Hydro does not have a surplus but still makes a lot of
24 money on exports by -- by buying and selling at different
25 times of the day.

1 But surely water conditions drive the
2 extent to which you can sell export power. That's a
3 simple relationship.

4 MR. BYRON WILLIAMS: And particularly in
5 Manitoba Hydro's situation?

6 MR. PATRICK BOWMAN: Yes.

7 MR. BYRON WILLIAMS: But there's some
8 risk attached to that in that low flow years there's --
9 there's less to sell; correct?

10 MR. PATRICK BOWMAN: Yes. I think
11 there's a -- there's a managed risk associated with that.
12 Low flow years there's less to sell and high flow years
13 there's more to sell, yes.

14 MR. BYRON WILLIAMS: And we also spoke as
15 the third factor market conditions elsewhere. And those
16 are a function of external events such -- external events
17 such as supply and demand elsewhere.

18 You'll agree with that?

19 MR. PATRICK BOWMAN: Sure. That -- that
20 seems relatively straightforward.

21 MR. BYRON WILLIAMS: That is pretty
22 straightforward. You shouldn't be so cautious, Mr.
23 Bowman.

24 And there's risk associated with that too
25 in terms of their effect on the magnitude of Manitoba

1 Hydro export revenues; is that not correct?

2 MR. PATRICK BOWMAN: There's risk
3 associated with that. I -- I expect it's upside and
4 downside risk and, as -- as you mentioned, supply and
5 demand conditions. But I think the thing we've seen more
6 a determining factor than supply and demand conditions is
7 market access and -- and police frameworks in other
8 jurisdictions, which -- which have been evolving. And,
9 if anything, those have been on the upside for Manitoba
10 Hydro, we hear, and -- and, in fact, have changed once
11 again in the last few months I understand.

12 MR. BYRON WILLIAMS: Thank you. And I
13 appreciate your enlightened answer -- enlightening
14 answer.

15 And I guess my simple point is that as a
16 result of those factors identified, especially water
17 flows and market conditions and market access elsewhere I
18 guess, export revenues can vary from year to year.

19 You'd agree with that?

20 MR. PATRICK BOWMAN: Yes.

21 MR. BYRON WILLIAMS: And you'd also agree
22 with me that it would be inappropriate to think of one
23 (1) year's good results as a windfall, because system
24 conditions and markets in subsequent years could produce
25 lower revenues.

1 about the type of hurdle rates that the utility uses to
2 want to commit to them -- to projects using a higher
3 hurdle rate for projects designed for export, as opposed
4 to designed for core utility service then that
5 relationship, yes, I can agree with that.

6 MR. BYRON WILLIAMS: So again within the
7 -- I understanding that there's a higher risk therefore
8 demanding higher hurdle rates, I wonder if you'd agree
9 with me that when higher returns do emerge, they can be
10 seen as simply compensation for that higher risk?

11 MR. PATRICK BOWMAN: I think there's a
12 link, yes.

13 MR. BYRON WILLIAMS: We won't belabour
14 that point too much or any more Mr. Bowman. Just for the
15 -- my understanding in -- you did mention in your very
16 impressive curriculum vitae the number of jurisdictions
17 that you've performed work in.

18 Is my understanding correct that in terms
19 of BC Hydro there would be only one (1) proceeding that
20 you have worked on to date in that jurisdiction, is that
21 correct sir?

22 MR. PATRICK BOWMAN: It's pretty close,
23 there's only one (1) that I've cited in my resume, which
24 was working on a transmission capital project. I did
25 have a very small role in reviewing some documents

1 related to the heritage contract hearing, but it was
2 quite minor I just want to make sure the record is clear,
3 though.

4 MR. BYRON WILLIAMS: Thank you. And in
5 terms of the Regie which reviews aspects of the Hydro
6 Quebec operation, my understanding is that you've not
7 worked in that jurisdiction as part of a regulatory
8 review, is that correct?

9 MR. PATRICK BOWMAN: That's correct.

10 MR. BYRON WILLIAMS: And if I'm looking
11 around for other major utilities, let's look at -- have
12 you done anything before the Ontario Energy Board?

13 MR. PATRICK BOWMAN: No.

14 MR. BYRON WILLIAMS: I don't think you
15 need turn anywhere here, but you'll agree with me that
16 sometime -- at times in your evidence you use the term,
17 cost based rates, do you recall that, sir?

18 MR. PATRICK BOWMAN: Yes, I probably used
19 it a number of times. It's pretty common theme among the
20 jurisdictions we work.

21 MR. BYRON WILLIAMS: And by that my
22 understanding is that you mean rates that are developed
23 based on the actual accounting costs incurred by the
24 utility to provide that service, would that a fair
25 definition?

1 MR. PATRICK BOWMAN: Yes.

2 MR. BYRON WILLIAMS: Sounding uncannily
3 like your own words?

4 MR. PATRICK BOWMAN: Yes.

5 MR. BYRON WILLIAMS: And your evidence
6 before this tribunal is that for cost of service purposes
7 the costs should be the true accounting costs that the
8 utility incurs to provide that service, would that be
9 your position?

10 MR. PATRICK BOWMAN: Yes, the established
11 practice in Manitoba is cost of service based on analysis
12 of the embedded costs of the utility, the accounting
13 costs allocated to the customers of the service, yes.

14 MR. BYRON WILLIAMS: And you endorse that
15 established practice?

16 MR. PATRICK BOWMAN: Yes, it's a pretty
17 common practice across the country, but yes I think
18 that's a -- performed on that basis, cost of service is a
19 useful tool.

20 MR. BYRON WILLIAMS: Now, Mr. Bowman I'm
21 not sure if you were in the room during the discussion
22 between the Chair -- the Chairperson and Mr. Harper
23 regarding issues of inter-generational equity associated
24 with using embedded costs or replacement costs; do you
25 recall that discussion at all from either being in the

1 room or your review of the transcript?

2 MR. PATRICK BOWMAN: No, I wasn't -- I
3 wasn't in the room and I haven't had the opportunity to
4 review that transcript.

5 MR. BYRON WILLIAMS: That's okay. I
6 think -- I think you provide some evidence in response to
7 a TREE Interrogatory, TREE Number 3, that I just want to
8 follow up with you if I might.

9

10 (BRIEF PAUSE)

11

12 MR. PATRICK BOWMAN: Yes, I have it.

13 MR. BYRON WILLIAMS: In -- in TREE 3(b)
14 the proposition was put to you that charging current
15 customers on the basis of historic embedded costs creates
16 an inter-generational inequity by requiring future
17 customers to cover the difference between historic and
18 replacement costs.

19 And I wonder if you can provide me with
20 your thoughts -- and the room with your thoughts on
21 whether you accept that proposition or not?

22 MR. PATRICK BOWMAN: I don't accept the
23 proposition for two (2) reasons. One is, the thought
24 that today's customers are burdening future customers by
25 consuming resources that -- that are at low cost and as a

1 result future customers will only have high cost
2 resources available does not bear out or hold true for
3 something like a hydraulic resource.

4 We -- we may be using a Limestone but
5 we're not using up Limestone. It will continue to be
6 available in the future and the use of it today does not
7 take away from a future generation's ability to continue
8 to use it. That's why hydraulic utilities are so
9 attractive. They have these long-term investments.

10 And the second point is, particularly when
11 looking at long-term assets like Manitoba Hydro's system,
12 the concept that today's ratepayers are burdening the
13 future with higher rates by -- by using power and making
14 decisions to grow and build the system just does not bear
15 out.

16 The extension of the argument would be
17 that -- that those who were around in the '70's and '80's
18 have stuck today's ratepayers with higher costs and I
19 don't -- I don't think that's true at all. I think the
20 opposite is true. The wise generations who went before
21 managed to put in place assets and grow a system that
22 today we're arguing the benefits of not the -- not the
23 burdens of.

24 MR. BYRON WILLIAMS: So just to try and
25 rephrase that, your position would be that to suggest

1 that our investments today will put a burden on those in
2 the future does a disservice to our past history in terms
3 of this -- in Manitoba where wise past investments have
4 proved future -- fruitful on a long-standing basis into
5 the future?

6 MR. PATRICK BOWMAN: I think we're saying
7 the same thing.

8 MR. BYRON WILLIAMS: And you -- you used
9 the example of Limestone and you'd agree with me that
10 something like Limestone may have caused Hydro's rates to
11 be even higher than they would have been over the short-
12 term without the plant and associated loads but the net
13 effect today is a beneficial low cost northern generation
14 system that's providing us with the very benefits that
15 we're debating in this hearing?

16 MR. PATRICK BOWMAN: I want to be very
17 cautious, Mr. Williams. Limestone resulted when it was
18 put into service over the very short-term, higher costs
19 for Hydro than had it not been built and an adverse
20 impact on its financial position, and during the hearings
21 before this Board in the early '90's there was a fair bit
22 of debate about deteriorating financial conditions as a
23 result of putting Limestone into service.

24 I'm -- I'm -- I'm just not accepting
25 necessarily the proposition that that flowed through to

1 higher rates because I think there was quite a -- quite a
2 wisdom at the time to recognize the temporary nature of
3 it to -- to ameliorate the effect on rates and develop
4 them slowly over time.

5 So were rates higher than they would have
6 been, I'm not sure. But I -- it is quite clear that
7 costs were higher than they would have been and financial
8 results were poorer than they would have been had
9 Limestone not been put in on a very short-term basis.

10 MR. BYRON WILLIAMS: So I -- I believe I
11 have your point which is that to the extent that the
12 financial position deteriorated, there were short-term
13 impacts, but the long-term benefit far outweighed the
14 short-term impacts?

15 MR. PATRICK BOWMAN: Yes.

16

17 (BRIEF PAUSE)

18

19 MR. BYRON WILLIAMS: We may or may not
20 come back to that point at another time.

21 And this is -- I have many -- a number of
22 -- more long snappers but I do have one (1) short snapper
23 here, Mr. Bowman.

24 At a high level you followed the
25 discussion in terms of the evidence of Mr. Lazar and his

1 discussion of externalities. Is that correct?

2 MR. PATRICK BOWMAN: Yes.

3 MR. BYRON WILLIAMS: And I'm not sure if
4 you're aware of this decision or not, have you heard of
5 or reviewed Regie Decision R-2004-96, which considered
6 the implications of including externalities in -- in
7 avoided costs for the purposes of DSM evaluation?

8 Is that a decision you're familiar with?

9 MR. PATRICK BOWMAN: No.

10 MR. BYRON WILLIAMS: So you wouldn't be
11 familiar with whether or not the Regie rejected the
12 concept of externalities in that court?

13 MR. PATRICK BOWMAN: No.

14 MR. BYRON WILLIAMS: I told you that
15 would be a short snapper.

16

17 (BRIEF PAUSE)

18

19 MR. BYRON WILLIAMS: I jokingly brought
20 out Mr. -- Mr. Harper's purloined copy of Bonbright.
21 We're not going to talk about it unfortunately, Mr. --
22 Mr. Bowman. But I -- I had a nervous twitch when I heard
23 someone say marginal costs earlier today.

24 But you've made your position quite clear,
25 I believe, that from your perspective -- I'm asking you

1 just to confirm your position without elaborating -- that
2 cost of service is really about, you know, getting cost
3 causation and -- and the equities right, whereas rate
4 design is really about achieving efficiency objectives.

5 Would you agree with that at a very high
6 and general level?

7 MR. PATRICK BOWMAN: Yes.

8 MR. BYRON WILLIAMS: And, again, without
9 asking you to elaborate too much at this point in time,
10 in the course of your evidence, both written and oral,
11 you've discussed how other jurisdictions have attempted
12 to achieve efficiency objectives through rate design.

13 Would that be fair?

14 MR. PATRICK BOWMAN: Yes.

15 MR. BYRON WILLIAMS: This is great. Your
16 answers are getting shorter than my questions, which --

17 MR. PATRICK BOWMAN: Yes.

18

19 (BRIEF PAUSE)

20

21 MR. BYRON WILLIAMS: And you've made
22 reference to the BC Hydro stepped rate proposal, correct,
23 both in your evidence written and oral?

24 MR. PATRICK BOWMAN: Yes.

25 MR. BYRON WILLIAMS: And I'll -- I'll get

1 into that in a -- in a bit more detail in just a second.
2 But my understanding is that one of the concepts that
3 flows from this stepped rate proposal, the basic
4 philosophy is that customer decisions at the margin
5 should respond to the cost of new supply rather than to
6 an existing embedded cost rate or a blended rate of old
7 and new costs.

8 Would you agree with that at a high level?

9

10 (BRIEF PAUSE)

11

12 MR. BYRON WILLIAMS: You're not going to
13 make me repeat that, are you?

14 MR. PATRICK BOWMAN: I'm not going to
15 make you repeat it but I'm going to take caution with two
16 (2) of the things you've just -- had embedded in there.

17 One is customer decisions at the margin.
18 For incremental changes for existing customers, yes,
19 that's true. It does not extend that same concept to new
20 customers who are to be socked with, quote, efficiency
21 rates.

22 The other thing I would say is you say the
23 -- the cost of new supply. My understanding, there was a
24 significant amount of debate about whether that cost of
25 new supply is long-run cost including capital or short-

1 run cost reflective of the market, and I don't -- do not
2 know the subtleties of that discussion.

3 But there's -- there's a lot of room for
4 latitude in the phrase that you used and I just want to
5 be -- be cautious that it's -- I don't know enough about
6 the debates that went on in British Columbia. I'm
7 assuming they were well informed and they came to a -- a
8 sensible conclusion in regards to the short run versus
9 long run, but I don't know enough about them to accept
10 that premise.

11 MR. BYRON WILLIAMS: That's fair enough.
12 And I wasn't brave enough to walk down the path of that
13 debate.

14 At a high level though you have some
15 familiarity with the concept and you've reproduced some
16 of those ideas in your evidence.

17 Is that correct?

18 MR. PATRICK BOWMAN: Yes.

19 MR. BYRON WILLIAMS: And I believe some
20 of those thoughts appear at pages 38 and 39 of your
21 evidence.

22 Is that right?

23 MR. PATRICK BOWMAN: Yes.

24 MR. BYRON WILLIAMS: I just want to make
25 sure that I understand the concept and I think you helped

1 me along with this. But as I understand it, rates are
2 set under this stepped rate proposal so as to be revenue
3 neutral for the class, is that correct?

4 MR. ANDREW MCLAREN: That's our
5 understanding, yes.

6 MR. BYRON WILLIAMS: Oh, we get to chat
7 at last. And my understanding is that a customer
8 baseline and I'll use the shorthand BCL, is established
9 for each customer equivalent to 90 percent of typical use
10 based on history, would that be a fair statement?

11 MR. ANDREW MCLAREN: Yes, that's our
12 understanding although BC Hydro calls it a CBL rather
13 than a BCL, but I think we're talking about the same
14 thing.

15 MR. BYRON WILLIAMS: And I meant to say
16 CBL, so thank you for your correction.

17 And then the last 10 percent of usage is
18 priced at marginal cost, is that correct?

19 MR. ANDREW MCLAREN: It's certainly
20 priced at a rate that is higher and probably more
21 reflective of marginal costs to the extent that it's
22 calculated on short run versus long run not on marginal
23 cost or only approximates it, rather than presents it
24 exactly, I'm not well enough informed to comment on.

25 MR. BYRON WILLIAMS: That's fair enough.

1 So some sort of proxy for marginal costs and we're not
2 going to get into whether it's short run or long run,
3 correct?

4 MR. ANDREW MCLAREN: My understanding is
5 the intent is to represent an approximation of the
6 marginal cost, yes.

7 MR. BYRON WILLIAMS: And the initial 90
8 percent is priced at a rate that will permit the average
9 revenue requirement to be recovered overall, is that
10 right?

11 MR. ANDREW MCLAREN: Yes, I believe that
12 that's the constraint imposed by the requirement that it
13 be revenue neutral, yes.

14 MR. BYRON WILLIAMS: So, just to simply
15 that -- that concept, the -- if the average -- let's say
16 the average embedded costs was 4 cents per kilowatt hour,
17 that first 90 percent would be priced to recover a bit
18 less than 4 cents a kilowatt hour, whereas the last 10
19 percent would make up for the shortfall and would be
20 priced somewhat above or perhaps significantly above,
21 would that be fair, the average embedded?

22 MR. ANDREW MCLAREN: I believe that's
23 generally fair. I believe that the second block rate is
24 actually determined first and then the mathematics for
25 the first block falls out of the revenue requirement.

1 MR. BYRON WILLIAMS: Thank you. But my
2 characterization with the first block of 90 percent being
3 below average embedded and the second block being well
4 above is correct?

5 MR. ANDREW MCLAREN: Yes, I would agree
6 with that.

7 MR. BYRON WILLIAMS: And I believe Mr.
8 Bowman might have put in this important caveat earlier,
9 but in terms of the customer baseline, my understanding
10 is that if usage over the year is between 90 percent and
11 100 percent of the CBL, there's no adjustment to the
12 baseline except under very specific circumstances, would
13 that be fair?

14 I think it's clause 4.1.1.2 if you're
15 looking for that, sir.

16

17 (BRIEF PAUSE)

18

19 MR. ANDREW MCLAREN: Yeah, I would agree
20 with the general premise I don't have the customer
21 baseline determination document directly in front of me,
22 but I believe that's generally correct.

23 MR. BYRON WILLIAMS: And I believe this
24 is where Mr. Bowman made note of the caveat. If it
25 expands, if there's a plant expansion, by that I mean

1 increased output capability of the plant, then the CBL
2 will be adjusted accordingly, would you agree with that?
3 That's section 4.1.2.2.

4 MR. ANDREW MCLAREN: I would agree that
5 there is, in my recollection a provision to allow the CBL
6 to be recalculated if there's a major change in the size
7 of the plant, yes.

8 MR. BYRON WILLIAMS: And I just want to
9 illustrate that with a very simple example, if I might.

10 If I start out with a plant with a 1000
11 megawatt hours of use, the customer baseline would be 900
12 megawatt hours. And then the amount above that being 100
13 megawatt hours would be priced at something that was
14 intended to reflect marginal costs, however defined,
15 would that be sfair?

16 MR. ANDREW MCLAREN: Yes, I believe so.

17 MR. BYRON WILLIAMS: And if we doubled
18 the size of the plant, going to 2,000 megawatt hours, the
19 -- the customer baseline would also expand accordingly,
20 so it would double from nine hundred (900) to eighteen
21 hundred (1,800).

22 Do you all agree with that?

23 MR. ANDREW MCLAREN: I'm not specifically
24 aware of the mechanics of how it would change or how it
25 would need to be approved in order to be changed but

1 generally I can accept that as reasonable, yes.

2

3 (BRIEF PAUSE)

4

5 MR. BYRON WILLIAMS: I want to just work
6 through the mechanics of this in a bit more detail.
7 Actually -- yeah -- just hold one (1) second, please.

8

9 (BRIEF PAUSE)

10

11 MR. BYRON WILLIAMS: Actually, looking at
12 the hour, I'll set that aside for right now and I'll --
13 I'll move on.

14 THE CHAIRPERSON: Mr. Williams, we're
15 just going to take a five (5) minute break and that will
16 give you a chance.

17

18 --- Upon recessing at 2:06 p.m.

19 --- Upon resuming at 2:17 p.m.

20

21 THE CHAIRPERSON: Okay. Welcome back,
22 folks.

23 Mr. Peters, do you want to relay a message
24 that we've just received from Mr. Anderson?

25 MR. BOB PETERS: Yes. Thank you, Mr.

1 Chairman.

2 I should say earlier this morning I did
3 receive a communication from Mr. Anderson indicating, I
4 think, he was en route to Thompson today and he would be
5 sending a letter to the Board with a request.

6 The letter has been received and the
7 letter has also been circulated to, I hope and I believe,
8 all Counsel who are here representing parties in the --
9 in the hearing.

10 And he's asking for the Board's permission
11 to make reference in his closing submissions to a number
12 of documents that he concludes are on the -- in the
13 public domain, and he sets them out.

14 And I would suggest, if the parties have
15 had an opportunity to read the letter, to indicate now to
16 the Board if there's any objection. And the results of
17 what the Board determines after hearing from the parties
18 in this room on this letter, I can communicate to Mr.
19 Anderson immediately.

20 THE CHAIRPERSON: Mr. Peters, I think
21 we'll wait until -- we're probably going to have another
22 break this afternoon, so we'll wait until after the next
23 one and then the parties will have an opportunity to have
24 a look at it, and then I'll ask them.

25 MR. BOB PETERS: Thank you.

1 THE CHAIRPERSON: Mr. Williams, do you
2 want to recommence?

3 MR. BYRON WILLIAMS: Yes. Thank you, Mr.
4 Chairman. I love these Friday afternoon cross-
5 examinations.

6

7 (BRIEF PAUSE)

8

9 CONTINUED BY MR. BYRON WILLIAMS:

10 MR. BYRON WILLIAMS: Mr. Bowman, I'm
11 going to touch very briefly upon the 2004 general rate
12 application and I'm going to ask you to refresh my memory
13 very briefly in terms of the evidence that you gave in
14 that application.

15 And I want to start first of all in terms
16 of the -- the rate increase sought by Manitoba Hydro in
17 that proceeding. My understanding was that they were
18 seeking rate increases somewhat in excess of inflation,
19 being 3 percent for the 04/05 year and 2.5 percent for
20 the 05/06 year.

21 Are you prepared to agree with that,
22 subject to check?

23 MR. PATRICK BOWMAN: Yes.

24 MR. BYRON WILLIAMS: And your advice to
25 the Board in that proceeding was that in keeping with

1 past practice of the Board rate increases should not be
2 allowed in excess of inflation.

3 Would that be correct, sir?

4 MR. PATRICK BOWMAN: I believe we
5 indicated one would want to weigh carefully departing
6 from something that had been in place for fifteen (15)
7 years, of not at any one time passing on rate increases
8 in excess of inflation.

9 MR. BYRON WILLIAMS: And at the end of
10 the day, when push came to shove, that was in essence
11 your recommendation, that the rate increase for 04/05 and
12 for 05/06 not be in excess of inflation; correct?

13 MR. PATRICK BOWMAN: Yes, I believe
14 that's correct.

15 MR. BYRON WILLIAMS: And part of the
16 reason for that advice to the Board was your
17 understanding of past practice of the Board and the fact
18 that that guideline or policy of rate increases at or
19 below inflation had served Manitoba Hydro well during the
20 drought of the 1980's as well as during the major capital
21 expansion associated with Limestone; is that correct,
22 sir?

23 MR. PATRICK BOWMAN: Yes, that was part
24 of our advice. I might remind you we didn't carry the
25 day.

1 MR. BYRON WILLIAMS: Yes, I still bear
2 the scars from that proceeding. Going -- going on in
3 terms of that proceeding, another painful subject for me,
4 you'll recall that during the 2004 general rate
5 application Manitoba Hydro was throwing around the figure
6 of \$2 billion in terms of risk of a five (5) year
7 drought; do you recall that, sir?

8 MR. PATRICK BOWMAN: I remember it
9 showing up, yes.

10 MR. BYRON WILLIAMS: And do you recall
11 characterizing that figure as a preliminary or
12 questionable -- or, excuse me, preliminary or guestimate
13 number? Would that be your recollection of your
14 evidence?

15 MR. PATRICK BOWMAN: I would recall
16 saying that we hadn't seen any analysis in support of it.
17 I'm not sure of the quotes that we used. But it was a
18 number that showed up, I believe, for the first time in
19 Manitoba Hydro's direct -- direct evidence in the -- in
20 the proceeding.

21 And we -- we had -- had not had a chance
22 to -- to ask Interrogatories or see any analysis in
23 support and we had some -- some concerns about -- about
24 the way it was being raised and -- and the particular
25 language that was used around it when -- when it was

1 first introduced which is sort of, as could be as high
2 as, language.

3 MR. BYRON WILLIAMS: And the opinion you
4 expressed at that point in time was that if you were
5 going to look at the risk of a drought you would want to
6 look at more than the absolute risk of a loss but you'd
7 also want to consider a number of other factors including
8 the probability of that -- that loss; you'll agree with
9 that?

10 MR. PATRICK BOWMAN: Yes. And this was
11 part of our comment in that hearing that \$2 billion was a
12 -- a -- a nice round number that was very similar to the
13 \$400 million loss times five (5). But when you talk
14 about a worst potential drought you don't take the worse
15 year and assume you have five (5) of them in a row you
16 would think about the relative balance between the
17 different years and the probability of that arising.

18 So that was the point we said we would
19 have liked to have seen some analysis on.

20 MR. BYRON WILLIAMS: And moving farther
21 down that path just for a second, you would also want to
22 look, in the course of that analysis, at other
23 overlapping risks and the -- the degree to which they
24 were positively or negatively correlated with the drought
25 risk; would that be correct, sir?

1 MR. PATRICK BOWMAN: I -- I -- yeah, I
2 believe that's fair. I don't want to overstate the
3 extent of analysis that one can do sometimes on something
4 like this. But I believe that's fair. I believe that's
5 what the Board asked for in 2003 and Hydro did in a
6 qualitative way in that hearing but we never did receive
7 the quantitative part of the risk analysis report.

8 MR. BYRON WILLIAMS: And would that still
9 be the case today, sir, that you've not received the
10 quantitative element of the risk analysis report?

11 MR. PATRICK BOWMAN: Well, I haven't seen
12 it. I was reading last night the Board's order from the
13 2004 rate application and there were some directives
14 there that -- that they were to respond to to the Board
15 and we haven't -- we haven't necessarily seen all of
16 those directives. So it's possible it's been provided.
17 I haven't personally seen it.

18 MR. BYRON WILLIAMS: So in terms of that
19 \$2 billion figure, that's one that you're not in a
20 position to endorse or reject?

21 MR. PATRICK BOWMAN: I can't comment
22 either way.

23 MR. BYRON WILLIAMS: But your -- your
24 advice, presumably, would be similar to what you gave to
25 the Board in 2004, is that there should be some sort of

1 rigour attached to the analysis in terms of whether we
2 want -- which particular figure we might want to look at;
3 is that right?

4 MR. PATRICK BOWMAN: Well, there should
5 be rigour for the parts of the assessment that -- that
6 suit rigour. There may be parts that is -- is -- sort of
7 beyond what one can rigorously analyse but for the parts
8 that one could analyse there should some rigour and it
9 has been done in the past, in terms of coming up with
10 drought risk back in the -- back in the day when there
11 was a two (2) year drought reserve target for Hydro,
12 before we went to the 75/25, there was some rigour
13 involved.

14 MR. BYRON WILLIAMS: And one (1) of the
15 reasons you would want to have some rigour in the areas
16 where rigour could be applied, is because over time
17 circumstances change but you want to have a principled
18 way at looking and analyzing the impact of those changes
19 over time, correct?

20 MR. PATRICK BOWMAN: That would be one
21 (1) reason.

22 MR. BYRON WILLIAMS: Thank you for that
23 Mr. Bowman and thank you for making my reminiscence along
24 that unhappy hearing as painless as possible.

25 Your evidence this morning, you really

1 talked about the process of setting rates for regulated
2 cost based utility as involved three (3) distinct steps,
3 would you agree with sir?

4 MR. PATRICK BOWMAN: Revenue requirement,
5 cost of service, and rate design, if that's what you
6 mean.

7 MR. BYRON WILLIAMS: You get 100 percent
8 on that exam question. And you'll agree with me that, in
9 fact, you noted this morning that normally revenue
10 requirement goes first and then the second phase is the
11 cost of service analysis, is that correct?

12 MR. PATRICK BOWMAN: Often they're deal
13 with separately, certainly notionally they're -- they go
14 in that order.

15 MR. BYRON WILLIAMS: And, in fact, and
16 it's set out at page 5 of your evidence, but your
17 understanding of this proceeding is that this is the
18 first time that a cost of service approach and method
19 will be reviewed in a special hearing outside of Hydro's
20 rate review, is that correct?

21 MR. PATRICK BOWMAN: Yes, to my
22 knowledge, that's the only cost of service -- the only
23 time cost of service has been reviewed within the context
24 of a rate hearing.

25 MR. BYRON WILLIAMS: And based upon your

1 review of the material in this proceeding, the Board has
2 made it quite clear that this analysis of the cost of
3 service methodology is to consider the issues surrounding
4 the cost of service study and resolve them prior to
5 considering the Manitoba Hydro's next general rate
6 application, is that correct sir?

7 I'm quoting from the letter of Mr.
8 Goudreau in footnote 2, if you're looking for that.

9 MR. PATRICK BOWMAN: No, I recognize the
10 quote.

11 MR. ROBERT MAYER: Mr. Williams, we are
12 aware of what we ordered. And Mr. Bowman's agreeing with
13 it or not is irrelevant to the Board.

14 MR. BYRON WILLIAMS: I won't be long, Mr.
15 Mayer, but there's a point to my question.

16 MR. PATRICK BOWMAN: Mr. Williams, as
17 I've listened to the quote now it certainly reminds me
18 that the Board's directive in this Hearing had a certain
19 narrow scope compared to what issues seem to have been
20 raised within the Hearing in order to consider that
21 narrow scope.

22 This has been a difficult process with
23 quite a broad range of issues that seem to go beyond that
24 -- those matters and that professionally I would say is
25 necessary in order to achieve the narrow scope set out by

1 the Board.

2

3

(BRIEF PAUSE)

4

5 CONTINUED BY MR. BYRON WILLIAMS:

6 MR. BYRON WILLIAMS: And just mindful of
7 the Vice Chair's comments but not wanting to lose my
8 thread of thought, just going to your point of narrow --
9 the narrow scope of this proceeding.

10 In your evidence, you don't need to turn
11 to it, your reference again this morning you noted that
12 when we look at bulk power costs before export credits,
13 there's been a substantial growth between 2004 and 2006,
14 in the range of about \$100 million, right?

15 That's page 15 and 16 of your evidence,
16 top of page 16, sir.

17 MR. PATRICK BOWMAN: Yeah, that's --
18 those numbers are shown in table 3-1, at page 15 of the
19 evidence and yes, the bulk power costs in the cost of
20 service study are up by about 100 million compared to
21 '04.

22 MR. BYRON WILLIAMS: And you also
23 observed, both this morning and in your written evidence,
24 that these have not been tested; correct?

25 MR. PATRICK BOWMAN: Well, there's been

1 no rate application since that time.

2 MR. BYRON WILLIAMS: And you're not
3 suggesting that we would want to test the reasonableness
4 of those numbers in this proceeding; correct?

5 MR. PATRICK BOWMAN: Correct. Although,
6 Mr. Williams, I would note that in -- in considering a
7 cost of service assessment in the narrow cost of service
8 box, we said one of the things that you would want to
9 consider is what types of loads or system changes are
10 driving costs.

11 Here we see cost changing and the
12 underlying drivers for those changes are ultimately
13 relevant to cost of service. This is why the narrow
14 versus broad focus gets -- gets the hearing expanse.

15 MR. BYRON WILLIAMS: And just so my point
16 is clear, but this isn't about testing the reasonableness
17 of those expenditures; correct?

18 MR. PATRICK BOWMAN: No. At the end of
19 the day we don't have evidence to talk about the
20 reasonableness of 1.1 billion versus 1 billion. We -- we
21 do talk though about the kinds of things that would go
22 into driving those costs up.

23 MR. BYRON WILLIAMS: I appreciate this
24 morning in terms of your evidence you clarified for me
25 your position in this hearing, or I think you have, and

1 I'm going to try and summarize it to you in -- in baby
2 steps, and you can correct me if I mischaracterize your
3 position.

4 In terms of a methodology for identifying
5 or allocating excess export revenues, your position is
6 that you're not satisfied with anything currently on the
7 table in this proceeding.

8 Would that be fair?

9 MR. PATRICK BOWMAN: I'm sorry, that
10 sounds very broad. Can you just repeat the question so
11 I'm sure what I'm answering.

12 MR. BYRON WILLIAMS: You've identified
13 the -- the proper allocation of costs to the -- to
14 exports as being an important part of this proceeding.
15 To date you've seen nothing in this hearing which would
16 satisfy you that there's an appropriate methodology
17 before the Board other than the current methodology.

18 Would that be fair?

19 MR. PATRICK BOWMAN: In the cost of
20 service box we are saying retaining core first principles
21 to guide when doing cost of service is what we would
22 recommend, and that results in respective export
23 revenues, effectively the current method, yes. I'm
24 sorry. The current method in terms of generation and
25 transmission outside of the issues of an export class,

1 whether it's within an export class or outside of it, but
2 ultimately that it links to the functions, maintain the
3 functional integrity of the cost of service study.

4 MR. BYRON WILLIAMS: And as I understand
5 your evidence, and just to summarize that point, you're
6 suggesting that all export revenues in the cost of
7 service study should be allocated back to generation and
8 transmission; correct?

9 MR. PATRICK BOWMAN: Ultimately, either
10 via an export class or via a credit of the form done in
11 the current method, yes, that's correct.

12 MR. BYRON WILLIAMS: And when we get to
13 the next proceeding, which is a general rate application,
14 you're suggesting that Manitoba Hydro should come back
15 and consider a number of issues including a -- a number
16 of issues in terms of identifying what, if any, excess
17 export revenues there are.

18 Is that correct?

19 MR. PATRICK BOWMAN: Yes. We're saying
20 that the building blocks of Hydro's proposals which are
21 two (2) problems they see for which they take a run at
22 the cost of service and -- in terms of the first
23 principle, saying, We want to yield on the first
24 principles and stay within the cost of service box.

25 We're saying that's the wrong mix, that

1 the problems that are being put forward, one is a revenue
2 requirement problem, one is a rate design problem, they
3 can surely be addressed in those forms properly and they
4 -- they are not the foundations for -- they are not
5 properly foundations for proposed changes to the cost of
6 service as have been put forward.

7 MR. BYRON WILLIAMS: And so you -- you'd
8 go on to say that at that general rate application one of
9 the things we should be considering is whether there's
10 some sort of -- we'll label it -- threshold approach to
11 appropriately identify export revenues.

12 Would that be fair?

13 MR. PATRICK BOWMAN: Yes.

14 MR. BYRON WILLIAMS: And you're also
15 saying that at the general rate application you think
16 Hydro and other parties should come forward and say, Once
17 -- Once we've come up with a process to appropriately
18 identify these export revenues, we should be coming back
19 and saying how they are most appropriately assigned; is
20 that right?

21 MR. PATRICK BOWMAN: Any export revenues
22 determined to be excess we should determine in a general
23 rate application the appropriate way to deal with those -
24 - those excesses, yes.

25 Although we have put forward some ideas in

1 this proceeding to give -- give an example of the types
2 of things we would think one would want to consider.

3 MR. BYRON WILLIAMS: And I'll come back
4 to that in just one second. So the thrust of your
5 evidence, and hopefully I don't mischaracterize it, is
6 that many of the issues that the Board might have been
7 hoping to resolve in this proceeding are deserving of
8 more study and should be reconsidered at the next general
9 rate application; would that be fair?

10 MR. PATRICK BOWMAN: I can't comment on
11 that. My only guidance on the Board's -- what was in the
12 Board's mind is the scope that they set out and that's
13 what we followed. I don't know what the Board was hoping
14 to accomplish, per se.

15 MR. BYRON WILLIAMS: Fair enough. You'll
16 agree with me that one of the big issues on the table in
17 this proceeding was the appropriate allocation of export
18 revenues; correct?

19 MR. PATRICK BOWMAN: Within the cost of
20 service study and, yes, we've addressed that.

21 MR. BYRON WILLIAMS: And at the end of
22 the day you're suggesting that there's still more debate
23 to come on that which -- which more properly be in the
24 next general rate application; correct?

25 MR. PATRICK BOWMAN: We are not

1 suggesting there is more debate to come on the
2 appropriate allocation of export revenues in the cost of
3 service study. There may be debate to come in regards to
4 some level of export revenues not being included in the
5 cost of service study.

6 MR. BYRON WILLIAMS: And one of your
7 suggestions in the course of this proceeding relates to
8 the appropriation of whatever excess export revenues
9 might be identified to a special reserve established as a
10 rate stabilization protection against the drought; is
11 that correct?

12 MR. PATRICK BOWMAN: Yes. We're saying
13 if the problem is too much export revenues and that
14 problem bears out under close scrutiny in the context of
15 revenue requirement hearing one would want to look to
16 these matters of financial condition and risks and
17 drought and reserves as a -- as a consideration as to how
18 you might use such an excess.

19 MR. BYRON WILLIAMS: And you discussed
20 this briefly with the Chairman this morning but you'll
21 agree with me that such an appropriation to this drought
22 reserve is likely in the short term to impose new costs
23 on Manitoba consumers; correct?

24 MR. PATRICK BOWMAN: Mr. Williams, the
25 way that we are talking about it in Manitoba, such an

1 appropriation would be likely to cause a short-term
2 impact on rates in Manitoba, yes, that's correct.

3 This is somewhat different than, say,
4 stabilization mechanisms in other places where the
5 reserve or stabilization fund could go both positive and
6 negative and if you started off on the drought foot it
7 would start by going negative. We're not recommending
8 that in Manitoba.

9 We're not recommending negative equity or
10 negative reserves.

11 MR. BYRON WILLIAMS: And just so I'm
12 clear on that point, that may be -- may short circuit
13 some of the discussion we're going to have a bit later.
14 In terms of other jurisdictions such as the Northwest
15 Territories, they don't have a surcharge or short-term
16 cost imposed up front in terms of building up their
17 reserves; is that your understanding?

18 MR. PATRICK BOWMAN: The initial proposal
19 in Northwest Territories when a rate stabilization fund
20 was proposed was a surcharge up front and out of the
21 negotiation with the customer they ultimately determined
22 they would let it be a balancing factor such as rates are
23 set on normal water and it could be credited or debited
24 in any given year until it hits a trigger.

25 And once it hits a trigger one would

1 impose a surcharge or a refund.

2 MR. BYRON WILLIAMS: I believe the words
3 they use in the Northwest Territories is that they
4 rejected a surcharge and that they would use a rate
5 rider; would that be your understanding?

6 MR. PATRICK BOWMAN: If the -- now, we're
7 talking about the hydraulic fund in Northwest
8 Territories. There is also fuel stabilization funds.
9 But in the case of water hydraulic funds there would be a
10 -- a surcharge or refund by way of a rider when the fund
11 reaches a certain trigger level.

12 MR. BYRON WILLIAMS: But no up front
13 surcharge?

14 MR. PATRICK BOWMAN: No, when it was
15 established they decided not to do an upfront surcharge.
16 That's somewhat different than Yukon which has a diesel
17 contingency fund which was established by way of an
18 appropriation of a substantial excess revenues from when
19 the mine first connected and the utility's rates were not
20 quickly adjusted. So they had an excess that they used
21 to establish the fund.

22 MR. BYRON WILLIAMS: The -- just so I
23 understand, the Northwest Territories proposal would be
24 more analogous to Newfoundland; would that be fair?

25 MR. PATRICK BOWMAN: Well, all of the

1 funds ultimately run on the same basis, set your rates
2 based on median water. And if water flows are better or
3 worse, positive or negative, it would adjust the fund.

4 The difference is Yukon's was set up with
5 an initial appropriation. Northwest Territories was not.
6 And Newfoundland's -- I was not there when it was
7 established, it was about the 1980's, but my
8 understanding is it was not.

9 As a matter of fact, it may go before the
10 1980's.

11 MR. BYRON WILLIAMS: Thank you Mr.
12 Bowman. And that's helpful. I think it's saved us both
13 some time later on.

14 In terms of the question posed to you by
15 the Chairperson and Mr. Chairman, I have an Exhibit that
16 I'd like to present to Mr. Bowman. Parts of it I shared
17 with him this morning, parts of it I shared with him this
18 afternoon.

19 So I'm proposing to present it to Mr.
20 Bowman and Ms. McCaffrey and I'll try and have it entered
21 as an Exhibit with the Chairman's permission.

22 THE CHAIRPERSON: Do you have --

23 MS. TAMARA MCCAFFREY: We don't have any
24 objections.

25 MR. BYRON WILLIAMS: Yes, so I'd ask Mr.

1 Barron to distribute it.

2 THE CHAIRPERSON: Okay.

3

4 (BRIEF PAUSE)

5

6 THE CHAIRPERSON: This collage would be
7 one (1) Exhibit?

8 MR. BYRON WILLIAMS: Yes, Mr. Chair.

9 THE CHAIRPERSON: Do you have the number,
10 Mr. Williams? 7 -- CAC/MSOS-7.

11 MR. BYRON WILLIAMS: Let me express my
12 gratitude to Mr. Barron because there's not a chance that
13 I had the number at hand.

14

15 --- EXHIBIT CAC/MSOS-7: 4 pages of data

16

17 THE CHAIRPERSON: So you can proceed, Mr.
18 Williams.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21 MR. BYRON WILLIAMS: Mr. Bowman, just at
22 a very high level perhaps we should attempt to describe
23 this table. And you'll agree with me that there is four
24 (4) separate pages.

25 The first page being an excerpt from the

1 integrated financial forecast MH-04-1 page 29, is that
2 right, sir?

3 MR. PATRICK BOWMAN: Yes.

4 MR. BYRON WILLIAMS: And that -- it's
5 presents the electric operations, projected operating
6 statement for the years ending March 31st and running on
7 a ten (10) year from 2005 up to 2015, is that right sir?

8 MR. PATRICK BOWMAN: Yes.

9 MR. BYRON WILLIAMS: And you'll if you
10 turn now to table 1, which is identified as simplified
11 electric operations statement, do you see that sir?

12 MR. PATRICK BOWMAN: Yes.

13 MR. BYRON WILLIAMS: And Mr. Chairman,
14 just for your information where we will go with this --
15 these tables is hopefully one (1) of the questions you
16 had asked this morning was, what is the -- one (1) of the
17 questions you had asked this morning was the potential
18 cost impact of an appropriation to reserves.

19 So we wanted to -- in a very simplified
20 version, demonstrate this. First of all, referring to
21 table 1, Mr. Bowman, you'll agree with me that it's at a
22 simplified level merely an extract from the integrated
23 financial forecast for Manitoba Hydro '04-1, from the --
24 for the '05/06 year, is that right sir?

25 MR. PATRICK BOWMAN: I'm sorry, on the

1 second page?

2 MR. BYRON WILLIAMS: Yes, table 1 which
3 is on the second page.

4 MR. PATRICK BOWMAN: It looks like almost
5 the same numbers.

6 MR. BYRON WILLIAMS: And just to -- so we
7 don't misinform the Board, on page 1 under the year 2006,
8 you've got general consumer revenue at approved rates
9 being 1 billion 10 million, or 1 billion, 11 million and
10 we've simplified that to 1 billion 10 million, on table
11 1, is that right?

12 MR. PATRICK BOWMAN: Table 1 says, 1
13 billion, 10 million.

14 MR. BYRON WILLIAMS: And as you go down
15 it, you'll see that what it includes is the three (3)
16 main components of total revenue being domestic export
17 and other and that yields total revenue of 1.58 billion,
18 correct sir?

19 MR. PATRICK BOWMAN: Yes, 1.58 billion is
20 the number shown on table 1.

21 MR. BYRON WILLIAMS: And we also
22 demonstrate costs totally 1.37 billion, correct?

23 MR. PATRICK BOWMAN: Yes.

24 MR. BYRON WILLIAMS: And that leaves a
25 net income of 210 million; correct?

1 MR. PATRICK BOWMAN: Yes. It's -- it's
2 two hundred and eight (208) on the IFF, two hundred and
3 ten (210) on your schedule but, yes, it's two hundred --
4 I see two hundred and ten (210).

5 MR. BYRON WILLIAMS: And you agree with
6 me that that -- this is just a simplified translation
7 from the IFF?

8 MR. PATRICK BOWMAN: Yeah. And I'm --

9 MR. ROBERT MAYER: This is not a
10 translation. You've reduced eleven (11) to ten (10),
11 you've changed a couple of million dollars on the bottom
12 line. I mean, how is that a translation?

13 MR. BYRON WILLIAMS: It's just -- and I
14 apologize, Mr. Mayer, there's no attempt to -- to
15 mislead. It's just the numbers -- or it's just for
16 illustrative purpose. The -- it leaves the -- it tells
17 the same story, if you'll follow the story.

18 THE CHAIRPERSON: Your intent, Mr.
19 Williams, is to show the effect of building up a reserve.

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22 MR. BYRON WILLIAMS: Yes. I'm getting a
23 lot of help in terms of my articulateness today, Mr.
24 Chair, and I appreciate it.

25 If we turn now to Table 2, Mr. Bowman,

1 granted that it's not an exact -- it's a simplified 05/06
2 electric operation statement. You'll see, if you refer
3 to -- to Footnote 2 and -- that -- or if you refer to the
4 second-last line of the -- of the table, that we've
5 inserted a special drought reserve appropriation of 50
6 million.

7 Do you see that, sir?

8 MR. PATRICK BOWMAN: Yes.

9 MR. BYRON WILLIAMS: And essentially you
10 can see what we're trying to do, using your words of
11 appropriation, is reflect the impact in a simplified
12 version of the electric operations statement of inserting
13 a new cost, namely a 50 million special drought reserve
14 appropriation; correct, sir?

15 MR. PATRICK BOWMAN: Yes. The -- and the
16 mathematics would be the same as to whether it was a -- a
17 new \$50 million appropriation or a reduced export
18 revenues for the purposes of the statement by 50 million.
19 But, yes, I see what you're trying to do.

20 MR. BYRON WILLIAMS: Essentially, what --
21 what the insertion of this new special drought reserve
22 appropriation does, is impose a new cost that if all
23 other things remain the same, has to be recovered through
24 domestic revenue.

25 Is that right, sir?

1 MR. PATRICK BOWMAN: Yes. If all other
2 things remain the same and in 2005/06 this proposal
3 existed and at a level of \$50 million and were imposed at
4 that one point in time, this is what the statement would
5 look like.

6 MR. BYRON WILLIAMS: And if we were to
7 compare Table 1 and Table 2 on the line of domestic
8 revenue, you'll see that the -- the difference is that
9 pre special drought reserve appropriation, the figure
10 used is 110 million, post special drought reserve
11 appropriate the figure used is 160 million; correct, sir?

12 MR. PATRICK BOWMAN: No. It's 1 billion
13 and 10 million on the first one and --

14 MR. BYRON WILLIAMS: Thank -- thank you
15 so much.

16 MR. PATRICK BOWMAN: -- and 1 billion and
17 60 million on the -- on the second one.

18 MR. BYRON WILLIAMS: I appreciate that.
19 And so that's a \$50 million increase in domestic
20 revenues; correct?

21 MR. PATRICK BOWMAN: Yes.

22 MR. BYRON WILLIAMS: And if one were
23 trying to get a sense of the mathematics of that
24 calculation, basically you would divide previous domestic
25 revenue based on a 100 million by the additional revenue

1 of 50 million and that would leave you with an additional
2 domestic rate increase required of 4.95 percent; correct?

3 MR. PATRICK BOWMAN: That's the result of
4 -- of the calculation you've done. Of course, we're
5 talking about -- individual classes would be affected
6 differently and -- and this would be something one would
7 consider over time, of course. But -- but, yeah, that --
8 all other things being equal in that year, that -- that's
9 the level we're talking about.

10 MR. BYRON WILLIAMS: I'd like you to turn
11 to Table 3 of CAC/MSOS Exhibit number 7. And you'll see
12 that in terms of the special drought reserve
13 appropriation, which appears on the second-last line of
14 this table, the figure has changed from 50 million to 290
15 million.

16 Do you see that, sir?

17 MR. PATRICK BOWMAN: I see it has changed
18 from fifty (50) to two hundred and ninety (290).

19 MR. BYRON WILLIAMS: And from the
20 footnote you can -- you'll agree with me that that 290
21 million figure is derived from Manitoba Hydro's
22 calculation of net export revenue; is that correct, sir?

23 MR. PATRICK BOWMAN: It seems you tried
24 to reflect a similar number, yes.

25 MR. BYRON WILLIAMS: Yes. And just lest

1 Mr. -- the Vice Chair chase me down, we were -- the
2 figure was 286 million in the Manitoba Hydro's
3 calculation and we rounded it to 290 million; you'll
4 agree with that?

5 MR. PATRICK BOWMAN: Yes, I will. The --
6 just the two hundred and eighty-six (286), I have notes
7 here that two hundred and eighty-six (286), a portion of
8 that, was -- went to some different customer classes
9 outside of the central system so I believe it ended up
10 being two eighty-one (281) allocated back to the central
11 system customers.

12 But we're all in the same range.

13 MR. BYRON WILLIAMS: So we're in the same
14 ballpark. And essentially what this table is trying to
15 present to you is let's say that your -- in terms of your
16 recommendations half were accepted and essentially
17 Manitoba Hydro's proposed or recommended method in terms
18 of creating a net export class is created but then those
19 excess revenues are allocated to a special drought
20 reserve, what this demonstrates is the additional
21 domestic rate increase required would be in the range of
22 28 percent; is that correct?

23 MR. PATRICK BOWMAN: You have the math
24 right. This is not half of our proposal though. This is
25 none of our proposal.

1 was just noting that that's a number that makes me not
2 the most popular guy at the MIPUG meeting. The second
3 page is not that. It is entirely different.

4 MR. BYRON WILLIAMS: Thank you for that.

5 MR. PATRICK BOWMAN: And by "the second
6 page" I mean Table 3.

7 MR. BYRON WILLIAMS: That would make you
8 exceedingly unpopular at the MIPUG meeting, I suspect.

9 MR. PATRICK BOWMAN: I think Mr.
10 Williams, it would make me unpopular within the
11 profession, given that I don't think it has professional
12 merit.

13 MR. BYRON WILLIAMS: Now, just -- I want
14 to go to the -- to the concept, very briefly, of an
15 export class and I've had -- had the opportunity to
16 review your evidence, Mr. Bowman, both from this hearing
17 and past hearings and if memory serves me right the
18 concept of an export class was first presented by the
19 Public Utilities Board itself in a decision dating back
20 either to the late 1980's or early 1990's; is that your
21 recollection as well?

22 MR. PATRICK BOWMAN: Yes.

23 MR. BYRON WILLIAMS: And, again, I don't
24 want to steal the Vice Chair's thunder but my next
25 recollection of the concept of an export class appearing

1 was in the 2002 rate application, perhaps in a footnote
2 or appendix to the evidence of yourself and Mr. Osler;
3 would that be your recollection as well?

4 MR. PATRICK BOWMAN: Not exactly. The
5 2002 evidence was responding to a proposal from Manitoba
6 Hydro that basically all export revenues beyond simple
7 variable be, in the words that people were talking about
8 at the time, "gravy, windfall, excess" and allocated on
9 total allocated costs.

10 Our review of that suggested that was not
11 a sensible proposal, given that one (1) couldn't even
12 begin to talk about something like windfalls or gravy
13 without thinking about the cost beyond simple variable
14 costs to serve exports.

15 So we spent some time in that appendix
16 talking about the fact that exports do drive our
17 considerations in the decision to invest in plant.

18 I don't think class was the core concept,
19 but spending on capital and that there being fixed costs
20 to serve export is beyond just variable costs was the
21 core concept.

22 MR. BYRON WILLIAMS: So if you didn't use
23 the word class, but the concept that flowed from your
24 evidence in 2002 was some sort of mechanism to ensure
25 that export revenues paid a fair share of their costs and

1 then following that we'd have a basis on -- an
2 intelligent basis to discuss how best to allocate any
3 excess revenues, would that be fair?

4 MR. PATRICK BOWMAN: The concept was
5 considerably more raw at that time than we're talking
6 about today but, basically the same, yes I think we've
7 been fairly consistent on that.

8 MR. BYRON WILLIAMS: Yeah and I don't
9 want to accuse of false modesty but it sounded to me in
10 that Hearing a lot -- perhaps you didn't use the word
11 export class, but it sounded a lot like what we see
12 today, as an export class at a thematic level.

13 MR. PATRICK BOWMAN: Well, I think all of
14 the in the room were still reacting to the idea at that
15 time. We noted that you can't talk about serving exports
16 by only looking at their variable costs.

17 There are clearly fixed costs. There are
18 clearly decisions made to make investment. And that one
19 would need to think about fixed costs.

20 I don't think we had turned our mind to
21 the difference between fixed costs being on an embedded
22 basis, a share of fixed costs in the form of a class that
23 NERA eventually came up with, versus something we're
24 talking about now, where we're saying, if you really want
25 to get on with defining the gravy, to use Mr. Peltz's

1 (phonetic) old word, that it's something beyond embedded
2 costs.

3 That was not a concept that we had spent
4 any time turning our minds to.

5 MR. BYRON WILLIAMS: Thank you for that.
6 And the reason you came up with the idea at that time and
7 I'm not asking you to elaborate, but you believed
8 Manitoba Hydro's proposal brought forward in the status
9 update was not based upon the best principle and
10 precedent and therefore you were presenting an
11 alternative concept, correct?

12 MR. PATRICK BOWMAN: Well, we were
13 indicating that it was Manitoba Hydro's proposal and that
14 hearing was the same stale concept that somehow exports
15 are all gravy. And they're not.

16 MR. BYRON WILLIAMS: And so your advice
17 to the Board was that the proposal by Hydro was not
18 appropriate and therefore that they should go away, use
19 this new concept, do some more homework and come back
20 with a better refined proposal, correct?

21 MR. PATRICK BOWMAN: No sir, I don't
22 believe that's the case. But I would want to review the
23 evidence before I commented on our exact recommendations.
24 I think you're talking about an attachment where we were
25 doing some analytical manipulations of different

1 possibilities.

2 But, I think ultimately if you go into the
3 evidence our recommendation was that the cost of service
4 study should maintain functional integrity and be based
5 on first principles.

6 MR. BYRON WILLIAMS: Okay. And I'm sorry
7 for -- I probably pushed that too far. Your advice at
8 that point in time, was that the -- it should continue to
9 be allocated on the basis of generation and transmission,
10 correct?

11 MR. PATRICK BOWMAN: Yes, that's correct.

12 MR. BYRON WILLIAMS: And the Board
13 accepted that but told Hydro to go away and study the
14 concept of an export class, that's your understanding of
15 that decision?

16 MR. PATRICK BOWMAN: Sir, having re-read
17 it last night, the Board accepted the cost of service
18 methodology we were putting forward and the functional
19 integrity to the cost of service and did direct Hydro to
20 go consider how to do an export class.

21 And the two (2) concepts were not
22 necessarily linked. There was no comment about -- and at
23 that point we'll want to reconsider giving some export
24 revenues to distribution. The statement was quite strong
25 that there was nothing new and functional integrity, I

1 don't believe that might have been the word, but that
2 there was nothing new in that proposals, to put exports
3 to distribution was still mere judgment.

4 MR. BYRON WILLIAMS: And in your view, at
5 the time without precedent and without principle?

6 MR. PATRICK BOWMAN: Well certainly
7 without precedent and certainly not based on first
8 principles of cost of service.

9 MR. BYRON WILLIAMS: And now as I
10 understand the history of what brings us here today,
11 Hydro went away and engaged NERA to do a study in terms
12 of the export class and we re-engaged in this debate in
13 the 2004 general rate application, is that right, the
14 2004/05 general rate application?

15 MR. PATRICK BOWMAN: I think there may
16 have been a few more steps in terms of reviewing variance
17 applications and revisions to directives, if I recall
18 correctly.

19 And if I recall correctly, the NERA
20 proposals -- or report was not solidly on the table in
21 the 2004 general rate application. It showed up later in
22 the hearing. It was not -- and Hydro did not have it as
23 a core part of their case. But I'm -- I'm just going on
24 memory now, Mr. Williams.

25 MR. BYRON WILLIAMS: And, again, at that

1 point in time you had concerns with the NERA approach in
2 that -- to the degree that you thought it was
3 unprecedented and inconsistent with first principles;
4 correct?

5 MR. PATRICK BOWMAN: I believe we made
6 some comments along that lines. Again, the NERA report
7 was not part of what Hydro submitted as its evidence in
8 that proceeding. It was submitted pursuant to a
9 directive later in -- in the filing and there were a fair
10 number of other matters at hand in that hearing, so it
11 was the core focus, but I believe we made some comments
12 on NERA that were along the lines you've said.

13 MR. BYRON WILLIAMS: And the Board made
14 some recommendations and Hydro was sent away to do some
15 more study, to -- to look at the NERA approach, to look
16 at the vintaging approach, to look -- and to present its
17 own recommended method.

18 Is that your recollection of the outcome
19 of that proceeding?

20 MR. PATRICK BOWMAN: Yeah. Those arose
21 in the orders from the 2004 GRA, 101/04, I believe.

22 MR. BYRON WILLIAMS: And we are back in
23 this hearing with a recommendation before you, and I'm
24 not inviting a speech but your basic response to the
25 Manitoba Hydro recommendation is that it's without

1 precedent and not consistent with first principles;
2 correct?

3 MR. PATRICK BOWMAN: That and it's
4 doesn't -- it's not a suitable response to solving the
5 problems that Hydro alleges are driving its decision.
6 It's -- it's the wrong tool.

7 MR. BYRON WILLIAMS: And, as I understood
8 your recommendations this morning, you're saying that
9 when it relates to the issue of identifying the
10 appropriate magnitude of whatever excess export revenues
11 do exist, that's a matter deserving of more study and
12 that's something that we can come back and address at a
13 future date, probably in the next general rate
14 application.

15 Is that right?

16 MR. PATRICK BOWMAN: Cost of service is
17 the wrong tool. We're not dealing with that today.

18

19 (BRIEF PAUSE)

20

21 MR. BYRON WILLIAMS: So this is something
22 that, again, requires more study, more consideration.

23 Is that right, sir?

24 MR. PATRICK BOWMAN: Our recommendations
25 were clear that it's a revenue requirement topic, it

1 should be addressed in a revenue requirement hearing and
2 in light of the other matters that are outstanding with
3 regard to revenue requirement hearings, like reserve,
4 provisions and -- and risk matters.

5 MR. BYRON WILLIAMS: And so one of the
6 consequences is that there will be more delay in
7 ultimately coming to the decision of how best to allocate
8 any excess revenues that exist.

9 Is that right?

10 MR. PATRICK BOWMAN: There will not be
11 any more delay in coming up with the cost of service
12 methodology. The matters are before the Board to be able
13 to make its decision in this hearing. In terms of the
14 matters of allocating export revenues, ultimately all of
15 this is only aimed at setting rates, and we're not
16 setting rates today either way, sir.

17 MR. BYRON WILLIAMS: So do I have you
18 right in terms of -- in terms of the issue of deciding
19 how best to allocate excess revenues, that there will be
20 no decision in this proceeding based upon your
21 recommendations?

22 If the Board was to accept your
23 recommendations we would go back to the current method
24 and we'd leave for another day the decision of how best
25 to allocate excess export revenues; correct?

1 MR. PATRICK BOWMAN: I -- I may need to
2 get you to repeat the question. I -- I lost you on going
3 back to the current.

4 MR. BYRON WILLIAMS: Perhaps I mix
5 concepts. And I'm -- I'm probably gilding the lily in
6 any event. But just so I'm clear, in terms of the issue
7 of allocating excess export revenues, your advice is the
8 Board -- is that is not an issue that we can decide
9 today?

10 MR. PATRICK BOWMAN: I don't believe
11 there's sufficient information before the Board to be
12 able to make a refined decision about how exactly you
13 would want to deal with, account for, or quantify the
14 excess export revenues as opposed to amounts below the
15 threshold.

16 I don't believe that was within the scope
17 of the hearing. The scope of the hearing was about cost
18 of service methodology.

19 I don't believe it delays anything given
20 that ultimately cost of service is simply a tool for
21 setting rates and it hasn't even necessarily been a
22 particularly rigid tool in Manitoba, when we look at the
23 RCC ratios. They've been driven primarily by other
24 considerations.

25 MR. BYRON WILLIAMS: And in the interim

1 the status quo of the current recommendations will be
2 preserved, correct -- or excuse me, the current
3 allocation of export revenues will be preserved, correct?

4 MR. PATRICK BOWMAN: I'm told your
5 question had the word interim in it and I may have lost
6 it, so maybe I should get you to repeat it.

7 MR. BYRON WILLIAMS: If it did, I
8 apologize for that. In the event that the Board accepts
9 your recommendation, the current method will continue to
10 be the status quo, correct?

11 MR. PATRICK BOWMAN: With regard to
12 treatment of export revenues in the cost of service
13 study, the current methodology would be retained, with
14 the exception of any difference that comes up with regard
15 to an export class, where revenues may flow against the
16 assets by way of the export class and others may flow
17 against the assets by way of another route.

18 Nonetheless, it would remain the
19 functional link, the functional integrity that is there
20 now.

21 MR. BYRON WILLIAMS: Mr. Chairman, I have
22 about fifteen (15) minutes or so to go, fifteen (15) or
23 twenty (20) -- I would appreciate an opportunity just to
24 collect my thoughts and a brief stand down, five (5)
25 minutes or ten (10) minutes, if that's --

1 THE CHAIRPERSON: Yes, I think pretty well
2 on the hour we're going to take ten (10) minutes.
3 Thanks.

4
5 --- Upon recessing at 3:08 P.M.

6 --- Upon resuming at 3:22 p.m.

7
8 THE CHAIRPERSON: Okay, folks, let's
9 return to the task at hand. The first thing we have in
10 front of us, just to clear up this one matter, is the
11 letter from MKO requesting leave to make reference to
12 certain documents, three (3) of which are clearly
13 regulatory matters that are on the public record.

14 Does any Intervenor here, Mr. Buhr, Mr.
15 Williams, Ms. McCaffrey, object to providing this
16 dispensation to Mr. Anderson?

17 MR. DOUG BUHR: Mr. Chairman, seeing as
18 how you've raised my name, and I've been sitting here a
19 while, I can't resist. I have no problem with reference
20 to decisions. I have a problem when somebody wants to
21 refer to a record and I don't know what context and I
22 don't know what portion of it.

23 And the same applies even for information
24 that Manitoba Hydro has for public distribution. I think
25 it's important to know what the context is. And by

1 giving -- by asking this kind of blanket permission and
2 by granting it you're never going to know.

3 THE CHAIRPERSON: Not until he files.

4 MR. DOUG BUHR: Exactly.

5 MR. ROBERT MAYER: Mr. Buhr, I recognize
6 the concern and I have some concerns about the way Mr.
7 Anderson chooses to do things. But as I understand
8 argument, argument is not evidence.

9 Records of decisions are precedent but not
10 binding on this particular body but they are clearly not
11 evidence and I don't believe he gets the opportunity to
12 try to file new evidence at that point. You can give us
13 decisions. You can give us something in your argument,
14 but I don't believe that he gets to do any new evidence.

15 MR. DOUG BUHR: And I think you're
16 correct, Mr. Mayer. My concern though is that it puts
17 everybody else in this room, not knowing what the context
18 is and having agreed to it, without -- without even
19 seeing the stuff ahead of time.

20 THE CHAIRPERSON: Mr. Peters, do you have
21 any guidance to advise the Board on this?

22 MR. BOB PETERS: Well, my suggestion will
23 be that we can -- I can advise Mr. Anderson that his
24 letter was raised and that certainly parties would like
25 to see the specifics before they're going to see if

1 there's going to be any specific objection and that's Mr.
2 Buhr's, I think, concern.

3 And it will be up to him to bring it in to
4 closing argument and at that time parties will have to
5 respond to him and he won't have the advance notice.

6 THE CHAIRPERSON: So at that point in
7 time we'd have just a short adjournment and the parties
8 can review it and then we can return to it?

9 MR. BOB PETERS: Correct.

10 THE CHAIRPERSON: Very good.

11 MR. BYRON WILLIAMS: Mr. Chairman, just
12 for the record, I can indicate on behalf of my clients we
13 have no -- while we do have -- we understand Mr. Buhr's
14 analytical concerns, we don't feel that any prejudice
15 will result to our clients.

16 THE CHAIRPERSON: Thank you, Mr.
17 Williams.

18 Ms. McCaffrey, do you --

19 MS. TAMARA MCCAFFREY: I echo Mr. Buhr's
20 concerns. I can't possibly take a position when I don't
21 know what I'm taking a position to. But the Board's
22 rules of admissibility are fairly broad and I know that
23 when the time comes the Board will review it and
24 determine if it's relevant or not.

25 THE CHAIRPERSON: Fair enough. I think

1 this process --

2 MR. ROBERT MAYER: Can I make a
3 suggestion that Mr. Peters advise Mr. Anderson to be here
4 at least sometime in advance of opening argument on
5 Monday rather than walking in with his material halfway
6 through so that other parties will have the opportunity
7 prior to his actually delivering his argument to have at
8 least seen what it is he's dealing with and will have had
9 an opportunity to formulate any objections they may have
10 before we get into the middle of Mr. Anderson's argument.

11 THE CHAIRPERSON: Fair enough.
12 Mr. Peters, would you so advise Mr.
13 Anderson?

14 MR. BOB PETERS: I shall.

15 THE CHAIRPERSON: So that we don't
16 inconvenience the other parties, I suggest that what we
17 ask Mr. Anderson to arrive at is 8:45 and the other
18 parties could have a look at it then. Thank you.

19 MR. BOB PETERS: Thank you.

20 THE CHAIRPERSON: Most appreciated.
21 Mr. Williams...?

22

23 CONTINUED BY MR. BYRON WILLIAMS:

24 MR. BYRON WILLIAMS: Yes. Mr. Bowman,
25 we've had some discussion about the threshold concept and

1 my understanding is, again, without inviting argument,
2 analytically your suggestion is that a threshold is
3 preferable to trying to cost exports as a way of
4 determining excess export revenues.

5 Would that be fair?

6 MR. PATRICK BOWMAN: Can -- can you just
7 repeat it for me --

8 MR. BYRON WILLIAMS: No. I know --

9 MR. PATRICK BOWMAN: -- after the break
10 it's --

11 MR. BYRON WILLIAMS: Yeah. And I -- I --
12 well, let's -- let's -- let's say that you've presented a
13 threshold framework for -- for analytically looking at
14 the question of how to identify excess export revenues.

15 Is that correct?

16 MR. PATRICK BOWMAN: Well, we -- we
17 provided the language, the concept is sort of well
18 entrenched in many parties' positions.

19 MR. BYRON WILLIAMS: And that's captured
20 in your evidence at page 15, how you've identified that
21 threshold; is that correct?

22 MR. PATRICK BOWMAN: How we've captured
23 the language to try to describe what we see as that
24 position, yes.

25 MR. BYRON WILLIAMS: And for the purposes

1 of your evidence in terms of defining the threshold, you
2 looked to the percentage of bulk power costs covered by
3 net exports; is that correct, sir?

4 MR. PATRICK BOWMAN: I -- I covered this
5 in my -- in my direct. For the purposes of sending out
6 some numbers for discussion and some concepts for
7 discussion, we dealt with Table 3.1, we had some --
8 determined it as a percentage of -- of generation costs.
9 It's -- it's not a way we would suggest one would want to
10 define a threshold going forward or the concept to be
11 embraced.

12 MR. BYRON WILLIAMS: Right. I believe in
13 your discussion this morning you described it as -- you
14 used the word "simple" and -- and from that I took it was
15 meant for illustrative purposes; is that right?

16 MR. PATRICK BOWMAN: Yes, that's fair.

17 MR. BYRON WILLIAMS: And I believe
18 elsewhere in your evidence, perhaps in response to
19 CAC/MSOS Interrogatory number 8, you expressed the view
20 that over time the -- using this sort of measure, being
21 percentage of bulk power costs covered by net exports, is
22 likely to be a poor measure; is that right?

23 MR. PATRICK BOWMAN: Yes.

24 MR. BYRON WILLIAMS: Now, just at a high
25 level, what we're trying to grapple with here is whether,

1 as a result in the change of market conditions, there's
2 been some sort of change that results in what might be
3 characterized -- appropriately characterized as excess
4 export revenues.

5 Is that right, sir?

6 MR. PATRICK BOWMAN: Yes.

7 MR. BYRON WILLIAMS: And in your evidence
8 you've identified, when we try and get a sense of what
9 the change is, that the major difference in export sales
10 revenue is from increases in price.

11 Is that fair?

12 MR. PATRICK BOWMAN: Well, we note in
13 particular the major difference of increases in price
14 that occurred, looking at the table, between about 1996
15 and 2002 was -- was a change of that type. We'd also say
16 though that there's been a fair number of other
17 corresponding fundamental changes if one wants to put it
18 that way.

19 MR. BYRON WILLIAMS: But one of the key
20 fundamental changes was the change in export prices
21 versus domestic rates.

22 Is that fair?

23 MR. PATRICK BOWMAN: Well, it's -- it was
24 a material change. I think at this point it's a bit of
25 old news. New news on the front is the extent to which

1 Hydro can undertake activities to try to optimize it's
2 ability to capture those markets, to incur costs, to
3 secure them, to find the margin where it can, I believe
4 was the phrase of the sharp pencils.

5 And -- and also new news on the front in
6 terms of fundamental changes is the current level of
7 retained earnings as opposed to droughts and with the
8 information we now know from the 2003 drought, if I'm
9 remembering the year right.

10 MR. BYRON WILLIAMS: I guess what I'm
11 trying to get at, Mr. Bowman, is given -- and I believe
12 you used the word "the fundamental change" in part
13 associated with the rise in export revenues -- why not
14 use some sort of price per kilowatt hour for the purposes
15 of this evidence in assisting you in identifying that
16 threshold?

17 MR. PATRICK BOWMAN: Well, the primary
18 reason we didn't do that Mr. Williams, is because we were
19 talking about a cost of service context and in looking
20 over the cost of service studies that have risen over
21 many years, when one (1) goes back into the records from
22 the earlier hearings the quantity of export revenues
23 measured in kilowatt hours was not a consistent piece of
24 data available from that point in time.

25 There was a lot of information on the

1 dollars of export revenues from the early years, there
2 was not necessarily in the interrogatories from the '96
3 GRA or the '94 GRA, a good consistent set of what were
4 the underlying kilowatt hours, assumed in the IFF to get
5 to that level.

6 We asked for that in an undertaking and
7 Hydro still was able to produce actuals but, not
8 necessarily the kilowatt hours assumed in those old
9 IFF's.

10 MR. BYRON WILLIAMS: Data limitations
11 notwithstanding, analytically would you agree that some
12 sort of price per kilowatt measure of the threshold would
13 be preferable to the one (1) you presented in your
14 evidence?

15 MR. PATRICK BOWMAN: Yes, I agree with
16 that and I said that in my direct that one (1) would want
17 to think about probably about unit pricing more than
18 overall dollars.

19 Because the over all dollars will change over time as
20 Hydro makes investments.

21 MR. BYRON WILLIAMS: And if we wanted to
22 explore that concept just for the purposes of discussion,
23 I wonder if you'd agree with me that there would be some
24 complexities if one (1) wanted to use this as -- in terms
25 of designing the threshold, would you agree with that

1 sir?

2 MR. PATRICK BOWMAN: Yes.

3 MR. BYRON WILLIAMS: For example, there's
4 a range of domestic prices and there's -- being by
5 customer class and by makeup and there's also a range of
6 export prices being firm and opportunity.

7 So one (1) of the big questions would be
8 which one (1) would you use? Would you agree with that?

9 MR. PATRICK BOWMAN: No.

10 MR. BYRON WILLIAMS: So you don't see
11 that as an analytic problem -- well, maybe you could --
12 discuss some of the complexities that might flow from
13 using a price per kilowatt hour, as a measure of a
14 threshold?

15 MR. PATRICK BOWMAN: Sure, the price per
16 kilowatt hour or unit price of exports is, I think,
17 relatively universally been recognized in the room, as a
18 key measure for thinking about the value gained from the
19 export market, not necessarily the overall dollars,
20 particularly given the ability of the overall dollars to
21 change fairly dramatically over time if someone thinks
22 about bringing on a Wuskwatim or other types of
23 resources.

24 The -- so if we were to move to thinking
25 about a price per kilowatt hour for a threshold and

1 without trying to define that here today and with the
2 data that's before us and the tasks that before us in
3 cost of service, this being more of a revenue requirement
4 consideration; I think there would be a need to think
5 about the threshold being defined such that it evolves
6 over time.

7 It is likely to climb over time as Hydro
8 continues to optimize its system and find ways to make
9 investments to pursue exports, be that new purchases in
10 the US to allow it to sell to Ontario, be that
11 investments in facilities SSE's, DSM, to use a couple of
12 acronyms, purchasing wind, upgrading its -- rerunning
13 facilities, refurbishing plants and all of those
14 decisions that are fundamentally based on what value we
15 can secure from exports versus not secure.

16 Same way we talked about a stepped rate
17 for customers, Hydro faces effectively a stepped rate for
18 its supply, as it makes decisions at the margin with or
19 without all of these capital investments it might make
20 that changes the export revenues.

21 And that's what drives them in terms of
22 making their decisions. So as those decision are made
23 and more and more resources are brought on line to deal
24 with capturing the export market or to replace the growth
25 in domestic load, the exports are served at higher than

1 average prices.

2 We're not -- we're not talking about low
3 hanging fruit here, the best of the DSM, the best of the
4 SSE's are done. We move onto higher and higher cost runs
5 as we can capture them.

6 So over time there would need to be a
7 consideration of how this evolves and increases to
8 reflect the different resources Hydro is chasing. It
9 depends on what type of resources those are.

10 MR. BYRON WILLIAMS: So that sounds like
11 a pretty simple discussion, Mr. Bowman. Is that a simple
12 discussion?

13 MR. PATRICK BOWMAN: No.

14 MR. BYRON WILLIAMS: The concepts your
15 advancing, in fact, you'll agree with me might be
16 controversial among parties in this room, would you agree
17 with that?

18 MR. PATRICK BOWMAN: Yes.

19 MR. BYRON WILLIAMS: And because of their
20 complexity and controversy they might require a fair
21 degree of study, would you agree with that, sir?

22 MR. PATRICK BOWMAN: Yes. I would
23 particularly say it would require study in the context of
24 -- of setting a revenue requirement. They reflect
25 judgment in the context of -- of that type of

1 consideration as opposed to a cost of service type of
2 exercise.

3 MR. BYRON WILLIAMS: Thank you for that,
4 Mr. Bowman, and I've let you make two (2) speeches today
5 so I appreciate the brief answers for those last few
6 questions.

7 You mentioned the concept of sharpening
8 pencils and -- and without asking you elaborate to a
9 great degree, I take by that you were referring to
10 Manitoba Hydro's efforts in what might be called
11 arbitrage; is that right, sir?

12 MR. PATRICK BOWMAN: Well, that was the
13 context where the phrase arose. Mr. Cormie made the
14 context. But it certainly is not just arbitrage as I
15 understand Hydro to operate its system. If there's
16 margin to be had on short-term opportunities on purchases
17 or on investing in capital they -- I'm assuming they're
18 finding a way to seek it.

19 MR. BYRON WILLIAMS: And in terms of
20 short-term opportunities, and let's keep our discussion
21 to arbitrage, traditionally Manitoba Hydro has taken
22 advantage of arbitrage opportunities using different
23 times of the day; would that be correct, sir?

24 MR. PATRICK BOWMAN: That's my
25 understanding and that's certainly the -- the significant

1 benefit of -- of Hydro resources of being able to do
2 that. That's how -- that's how BC makes a lot of money
3 on export markets even though at the end of the day they
4 don't export any power.

5 MR. BYRON WILLIAMS: Yes. And now -- and
6 keeping our -- restricting our discussion to arbitrage
7 and sharp pencils, the new evidence in this hearing
8 suggests that not only are they using it -- taking
9 advantage of those opportunities, time of day, they're
10 also taking advantage of those opportunities in different
11 markets; would that be fair?

12 MR. PATRICK BOWMAN: That was the
13 evidence I heard earlier from Manitoba Hydro.

14 MR. BYRON WILLIAMS: Now, I was having a
15 little bit of trouble understanding this concept but in
16 essence they're acting as -- in terms restricted to the
17 arbitrage opportunities, almost like financial traders;
18 would that be fair?

19 MR. PATRICK BOWMAN: I -- I don't believe
20 so, Mr. Williams. Because as I understand the evidence
21 that was given Manitoba Hydro was not dealing in
22 financial instruments. It was dealing in its own power
23 and I think there's a difference.

24 MR. BYRON WILLIAMS: Fair enough. And
25 that's a fair clarification. Really what they were doing

1 was taking advantage of opportunities in the market in
2 buying and selling power either in -- at different times
3 of the day or in different markets and trying to realize
4 on those margins; correct?

5 MR. PATRICK BOWMAN: I heard the same
6 evidence you did, Mr. Williams. Yes.

7 MR. BYRON WILLIAMS: And in the course of
8 taking advantage of those opportunities that doesn't
9 involve or need any building of general assets? You'll -
10 - apart from transmission; you'll agree with that, sir?

11 MR. PATRICK BOWMAN: I believe the narrow
12 focus of the arbitrage opportunity that being spoken of
13 there doesn't -- isn't being driven by an investment in
14 assets but I believe there was a comment that it's being
15 restricted today by a limit on assets. A limit on
16 transmission assets.

17 MR. BYRON WILLIAMS: So it wasn't being
18 driven by any -- and certainly wasn't -- wouldn't drive -
19 - taking advantage of those opportunities would not drive
20 any investment decisions in generation; correct?

21 MR. PATRICK BOWMAN: I'm assuming, Mr.
22 Williams, that the type of transaction -- that type of
23 new transaction Mr. Cormie was talking about is
24 effectively real time; that you're talking about
25 transactions within the same hour of the day. And so in

1 that regard I don't -- I wouldn't understand any water to
2 be managed differently or any assets to be used
3 differently than they would have been used; that's the
4 way I understand this -- this new category.

5 MR. BYRON WILLIAMS: Now, Mr. Bowman, I
6 was out of the room but listening on the monitor when
7 your qualifications were identified and my understanding
8 is that you were identified as an expert in cost of
9 service and in terms of rate design; is that your
10 understanding as well?

11 MR. PATRICK BOWMAN: Yes.

12 MR. BYRON WILLIAMS: And you weren't
13 qualified as an expert, for example, as -- as a system
14 planner; would that be fair?

15 MS. TAMARA MCCAFFREY: Mr. Chairperson, I
16 don't want to interrupt My Friend, Mr. Williams, I'm not
17 quite sure where he's going with this. He was qualified
18 as an expert with respect to cost of service and rate
19 design in the context of this hearing.

20 Beyond that, I don't think it's been
21 discussed and/or reviewed in that case.

22 MR. PATRICK BOWMAN: If it's helpful, Mr.
23 Williams, I have appeared before the Northwest
24 Territories Public Utilities Board in respect of a
25 hearing dealing with required firm capacity planning, the

1 reliability issues related to that system and related
2 planning considerations.

3 The bulk of my testimony in regards to
4 that hearing was load analysis and the probabilities
5 related to system availability and measurement of
6 probability indices of -- of outages at peak times. That
7 was my comments about the coincident peak. That stems
8 from my experience in Northwest Territories and more
9 recently doing this work in Yukon, although I have not
10 been qualified as an expert in Yukon on these matters to
11 date, that application has just been filed.

12

13 CONTINUED BY MR. BYRON WILLIAMS:

14 MR. BYRON WILLIAMS: Well, let me -- let
15 me try this another way.

16 Have you ever worked as a system planner
17 for Manitoba Hydro?

18 MR. PATRICK BOWMAN: Absolutely not.

19 MR. BYRON WILLIAMS: You say that with
20 some sense of joy in your voice, Mr. Bowman. You don't
21 need to respond to that, you can though.

22 MR. PATRICK BOWMAN: No. Just certainty.

23 MR. BYRON WILLIAMS: Well, let's compare
24 your understanding of what a system planner -- what kind
25 of expertise that system planner might require.

1 One thing you would require obviously
2 would be to understand the system resource options;
3 correct?

4 MR. PATRICK BOWMAN: System planning is a
5 -- is a broad term. Surely the system resource options,
6 although the resource options have different aspects to
7 them, some are engineering aspects, some are financial
8 aspects, some are -- are load related aspects, but you --
9 you would need people with all of those skills in terms
10 of system planning.

11 MR. BYRON WILLIAMS: And do you have all
12 those skills, Mr. Bowman?

13 MR. PATRICK BOWMAN: No.

14 MR. BYRON WILLIAMS: And you'll also have
15 to understand system characteristics; would that be fair?

16 MR. PATRICK BOWMAN: Again, various
17 aspects of system characteristics, yes.

18 MR. BYRON WILLIAMS: And you'd have to
19 understand the economics of system development; is that
20 right?

21 MR. PATRICK BOWMAN: Yes.

22 MR. BYRON WILLIAMS: And if I was looking
23 at the economics system development, would it be your
24 view that that is something that you have greater
25 knowledge of or Mr. Cormie?

1 MS. TAMARA MCCAFFREY: Mr. Chairperson, I
2 -- I'm going to object to the question. I don't think --
3 perhaps My Friend Mr. Williams can make an argument along
4 the lines that he's going, I don't think this is an
5 appropriate question for this witness.

6

7 CONTINUED BY MR. BYRON WILLIAMS:

8 MR. BYRON WILLIAMS: Let me -- let me
9 just -- I'm almost done, Mr. Chairman, but do -- let me
10 put it this way, Mr. Bowman.

11 Do you have a detailed day-to-day
12 understanding of how the Manitoba Hydro electric system
13 works?

14 MR. PATRICK BOWMAN: Mr. Williams,
15 they're -- they're very much two (2) different questions
16 and I will answer -- to make it clear I will answer no to
17 both. I do not have a detailed experience working in
18 system operations, day-to-day operations, which is --
19 which is how the system works.

20 And I also do not have experience working
21 with Manitoba Hydro in their system planning department,
22 which is how the system is planned over the long term.

23 I have worked with other utilities related
24 to some of these matters but primarily in my areas of
25 expertise, which are economics, finance, rate impacts,

1 and also load analysis, and in some instances
2 probabilities of loss of load.

3 MR. BYRON WILLIAMS: I thank you, Mr.
4 Bowman, for that.

5 And, Mr. Chair, if you give two (2)
6 seconds I'll just reflect upon this.

7 THE CHAIRPERSON: Okay.

8

9 (BRIEF PAUSE)

10

11 MR. BYRON WILLIAMS: Mr. Chairman and
12 Members of the Board, thank you for your patience. That
13 confirms my cross -- or, confirms -- concludes our cross-
14 examination.

15 I do want to -- Mr. Harper has a plane to
16 catch and he has a -- an undertaking to -- to present to
17 the Board. So I'd like to take this opportunity to
18 invite him back up for a second.

19 THE CHAIRPERSON: Absolutely.

20

21 (BRIEF PAUSE)

22

23 THE CHAIRPERSON: Mr. Harper...?

24 MR. WILLIAM HARPER: Ms. Bowman is
25 distributing the copies now. If you recall -- sorry, go

1 ahead.

2 MR. BYRON WILLIAMS: And we'd suggest it
3 be marked as CAC/MSOS Exhibit number 8.

4 THE CHAIRPERSON: Is that the number that
5 we have too?

6 MR. BYRON WILLIAMS: That may be the
7 first time in the history of these proceedings that I've
8 got it right.

9 THE CHAIRPERSON: I wouldn't be quite so
10 hard on myself, Mr. Williams.

11 MR. WILLIAM HARPER: While it's being
12 distributed --

13 THE CHAIRPERSON: Mr. Harper, if you
14 don't mind, it will only take a second.

15 MR. WILLIAM HARPER: Sure.

16

17 (BRIEF PAUSE)

18

19 THE CHAIRPERSON: I'd like to see the
20 Exhibit that we just numbered. Okay. So this is
21 CAC/MSOS Undertaking is now marked as CAC/MSOS 8,
22 reference transcript pages 1794 to 95.

23

24 --- EXHIBIT NO. CAC/MSOS-8: Response to CAC/MSOS

25 Undertaking reference transcript pages

1 1794 to 95.

2

3 THE CHAIRPERSON: Okay. Mr. Harper.

4 MR. WILLIAM HARPER: Yes, if you recall
5 during the end of yesterday I was talking to Mr. Peters
6 at that point in time, I'd indicated I'd had some
7 recommendations about a different treatment of purchase
8 power and following up on that I commented that would
9 have some impact on the treatment of water rentals.

10 And he'd asked me if I could quantify that
11 and I said I could with the assistance of Manitoba Hydro.
12 And subsequent to that they've been extremely helpful in
13 helping me put this together and in fact, I give them
14 credit for the bulk if not all of the work here. So
15 thanks to Manitoba Hydro.

16 We've tried to lay this out in two (2)
17 ways. One (1) showing at the page the Manitoba Hydro
18 method and at the bottom of the page my proposed method.
19 And I think the critical question in each case was, how
20 many dollars were being assigned directly to opportunity
21 sales for water rentals, as opposed to how many were
22 being put in the pot and allocated amongst firm and
23 domestic customers, just as part of the overall cost of
24 generation.

25 And under the Manitoba Hydro method, maybe

1 just to pause, there's -- and actually the dollar values
2 here are in thousands. So the total water rentals are
3 102,604,000 and out of those, under the Manitoba Hydro
4 method 11,697,100 would be assigned directly to
5 opportunity sales.

6 Under my method if we go to the bottom of
7 the page, it would be 13,283,000 for an increase of about
8 1.6 million.

9 THE CHAIRPERSON: And the rest of the
10 table is self-explanatory --

11 MR. WILLIAM HARPER: The rest of the
12 table sort of tries to show -- I think Mr. Peters was
13 interested in getting some sense out of the arithmetic
14 underlying it and so the rest of the table is just trying
15 to show -- go through the calculations to show how we got
16 there.

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: Mr. Peters, does this
21 do it?

22 MR. BOB PETERS: Just because I don't
23 want Mr. Harper to go home without answering one (1) more
24 question.

25 Were the numbers that were used to

1 generate these figures, was this out of the Manitoba
2 Hydro cost of service study information that was filed?

3 MR. WILLIAM HARPER: Well, if you look at
4 the material Manitoba Hydro filed in its recommended
5 method the 11,697,100 matches exactly with, I believe
6 it's PUB MH-15, actually is the number where -- is the IR
7 response where you'll find that number.

8

9 (BRIEF PAUSE)

10

11 THE CHAIRPERSON: Mr. Peters, I think we
12 could leave it with you and Mr. Buhr to --

13 MR. BOB PETERS: Yes, I think --

14 THE CHAIRPERSON: -- reconcile.

15 MR. BOB PETERS: -- we'll just verify
16 that. It doesn't quite jive with what I have here Mr.
17 Chairman, but, we'll check to see where the source of the
18 error is. And if there's something further I'll get back
19 to Mr. Williams on it and we'll bring it to the Board's
20 attention.

21 THE CHAIRPERSON: Very good.

22 MR. BOB PETERS: But I thank Mr. Harper
23 and Manitoba Hydro for providing this information. Thank
24 you very much.

25 THE CHAIRPERSON: Thank you. Mr. Harper,

1 thank you Mr. Williams. Have a good trip back, Mr.
2 Harper. I hope you find the weather as suitable back
3 home as it is here right now. Mind you, we're inside.

4 MS. TAMARA MCCAFFREY: I don't know the
5 weather was getting a little bit stormy in here a moment
6 ago, Mr. Chairperson.

7 I can indicate for the record that I don't
8 have re-direct examination.

9 THE CHAIRPERSON: We've got a few more to
10 go yet, but that's helpful. Thank you.

11 MS. TAMARA MCCAFFREY: Thank you. But,
12 I usually -- I try to deal with them after each cross-
13 examination but --

14 THE CHAIRPERSON: We won't hold you to
15 it, if something comes up. Next up is CCEP, Mr.
16 Feldschmid, I saw him awhile ago. Okay. He's gone.

17 MS. MYFANWY BOWMAN: He asked me to
18 indicate Mr. Chair, that he didn't have any questions of
19 these witnesses.

20 THE CHAIRPERSON: He had no questions.
21 Thank you.

22 Next up is the patient Mr. Buhr, City of
23 Winnipeg. Mr. Buhr...?

24 MR. DOUGLAS BUHR: No question, Mr.
25 Chairman.

1 THE CHAIRPERSON: Thank you, Mr. Buhr.

2 Ms. Ramage, we've reached Manitoba Hydro
3 on -- just about ten (10) to 4:00.

4 MS. PATTI RAMAGE: Okay. The clock can
5 begin.

6 THE CHAIRPERSON: Don't let me rush you.

7 MS. PATTI RAMAGE: Oh, it's not you
8 rushing me.

9

10 (BRIEF PAUSE)

11

12 CROSS-EXAMINATION BY MS. PATTI RAMAGE:

13 MS. PATTI RAMAGE: Mr. Bowman and Mr.
14 McLaren, I've heard a lot today about linkage and
15 entitlement, and those are two (2) concepts I -- I'd like
16 to explore with you. And perhaps if we could begin by
17 turning to Manitoba Hydro/MIPUG IR number 4. You may
18 want to reference it, you may be able to just zip through
19 this, but that's where I'm -- my questions are beginning
20 from.

21 And this -- this question was posed to
22 explore the concept of entitlement. And, as I understand
23 it, your support for the current method is based on your
24 view that generation and transmission was put in place to
25 benefit Manitoba firm customers.

1 Is that correct?

2 MR. PATRICK BOWMAN: Not primarily. Our
3 support for the current method of allocating generation
4 and transmission reflects on the three (3) key factors I
5 noted in our direct, which was, first, that it's an
6 established method in this jurisdiction that's been
7 reviewed and confirmed repeatedly; second, that it's
8 consistent with the first principles of cost causation
9 and cost allocation that one would find in -- in such as
10 a NARUC manual; and third, that it's consistent with all
11 the other jurisdictions, regulated jurisdictions who are
12 doing this sort of thing.

13 In addition, we note that it was put in
14 place to -- to benefit Manitoba customers. But that --
15 that doesn't tend to drive the -- the analysis towards
16 generation transmission. It's the three (3) first
17 factors that I noted primarily.

18 MS. PATTI RAMAGE: Okay. And those first
19 principles, your interpretation of them is that it's the
20 use of generation and transmission that entitles a
21 customer to the net export revenues.

22 Is that correct?

23 MR. PATRICK BOWMAN: Not precisely. It's
24 that the customers who are paying for the assets would be
25 credited back with the sales that are derived from those

1 assets. So it's not because a distribution customer uses
2 distribution poles that they get a credit for leasing
3 them to cable companies, it's because they're paying for
4 those poles and the revenues are derived from an asset
5 they're paying for.

6 It's -- it's the same principle to
7 exports.

8 MS. PATTI RAMAGE: But they pay for them
9 because they use them, correct? They don't pay more than
10 they use, they pay for them because they use them?

11 MR. PATRICK BOWMAN: Well, it's -- it's I
12 guess a bit of splitting hairs. The customers do use
13 them. Do they pay more than they use? Well, if they
14 were paying for all of the poles, even though the cable
15 companies were also using them, then they would be paying
16 more than they use.

17 But they're -- it's tied to being the
18 people who pay for the assets, not necessarily just to
19 the use of the assets.

20 MS. PATTI RAMAGE: The entitlement to --
21 to the benefits of the system, if I understand your
22 response correctly, they go without limit as to how high,
23 for example, export revenues would go or how high a
24 consumption -- a particular customers consumption goes;
25 is that correct?

1 You don't want -- you don't believe there
2 should be any limits?

3 MR. PATRICK BOWMAN: No. I don't -- I
4 don't believe that's what I said. The -- the entitlement
5 concept of ratepayers to low and stable rates and the
6 benefits that can be derived from the heritage resources,
7 arises from a public policy discussion and debate that
8 appears to still be in place and the context for
9 developing resources in Manitoba. That -- that's one
10 matter.

11 It's somewhat different than -- I'll use
12 the word entitlement even though it's -- it's not quite
13 correct -- the entitlement of a customer to not have to
14 pay for an asset that is in part being used to serve
15 another customer.

16 That -- that's the cost of service
17 analyst's aspect of analysing exports or analysing cable
18 company rental revenues or analysing any of those, is you
19 don't pay for the part of the asset that's being used to
20 serve someone else.

21 The -- it's somewhat different than the
22 public policy one and -- which is a little bit harder
23 debate that ties more to -- to broader considerations and
24 history.

25 MS. PATTI RAMAGE: Okay. We may be

1 splitting hairs. So I'm going to -- the question that we
2 put to you in the IR was:

3 "Please define the categories of
4 ratepayer who are so entitled and the
5 quantity of load to which each
6 ratepayer is entitled at attractive and
7 stable rates based on the generation
8 and transmission resources currently in
9 place."

10 And the answer I'm reading, and just
11 explain if -- if -- because I'm just concerned that our
12 interpretations are different and I wanted to clarify it,
13 the answer was:

14 "The category of ratepayers would be
15 expected to include all firm domestic
16 ratepayers."

17 That was the first line of the answer and
18 just to speed along, the last line is also:

19 "There is no specific quantity properly
20 allocated to each ratepayer as
21 indicated in this question."

22 So from that I took that everyone is
23 entitled and there is no quantity limits on what their
24 entitlement is?

25 MR. PATRICK BOWMAN: I think that's fair.

1 These are -- these can be a little bit esoteric debates
2 and they certainly arose in reviewing the record in other
3 jurisdictions like -- like BC who had to debate this in
4 the context of the government's heritage policy and
5 ultimately their conclusion if I -- if I'm recalling it
6 correctly, I believe the word they used was no particular
7 ratepayer or classes of ratepayers have -- have title to
8 the heritage assets or the output of them.

9 It's the ratepayers at a particular point
10 in time who can be served by the assets who share equally
11 in -- in the -- given their -- their -- what they pay for
12 the assets and the benefits therein.

13 In that regard I think -- I think the word
14 "title" was used more in a sort of legalistic sense that
15 you don't -- that it's not people who were here when they
16 were built as opposed to people who showed up later.

17 MS. PATTI RAMAGE: And what this leads me
18 to is I'm wondering if we -- and I -- quite frankly I
19 doubt this very much, but would we be safe in assuming
20 that based on this evidence that your clients won't be
21 complaining if Mr. Lazar's aluminum smelter or the
22 chlorate plants move into the province and expropriate
23 export benefits and at the same time drive up rates? Am
24 I hearing that we won't hear from your clients down the
25 road when their rates go up?

1 MS. TAMARA MCCAFFREY: Not sure --

2 THE CHAIRPERSON: I think Mr. Bowman can
3 only answer for himself whether -- whether you'll hear
4 from him.

5 MR. PATRICK BOWMAN: And I just want to
6 be careful. I'm not -- I'm a bit hung up on the word
7 "expropriate" -- the clients expropriate the -- the
8 power. But from -- from our perspective analysing the
9 evidence it would be discriminatory to treat old
10 customers versus new customers and to bar the doors; that
11 would be a normal regulatory principle.

12 In a -- I'm assuming in a short term
13 interest, be it residential or be it industrial, they may
14 benefit in the short-term by barring the doors. I -- I
15 think it's consistent with my comment earlier that we're
16 not necessarily the most popular people at the MIPUG
17 meeting when we talk about these sorts of things.

18 But ultimately, on a balanced assessment
19 of the way that a utility such as this would be
20 regulated, you don't discriminate between old customers
21 and new customers.

22

23 CONTINUED BY MS. PATTI RAMAGE:

24 MS. PATTI RAMAGE: This morning you said
25 you thought that Mr. Lazar's concern about the aluminum

1 smelters was overblown and Manitoba is not a Mecca for
2 the aluminium industry and I -- I also heard Dr. Miller
3 make reference to the chlorate industry as well.

4 Would you not think Manitoba Hydro could
5 end up a Mecca for the chlorate industry if we don't put
6 some sort of limits in place?

7 MR. PATRICK BOWMAN: The -- there's a
8 limit to where I can answer because I'm not an expert on
9 the sodium chlorate industry and how it evolves across
10 the globe. So I cannot answer in that context.

11 In terms of a limit, I noted in my direct
12 and also -- and this is in particularly in TREE IR Number
13 1 that there's some reference to the Quebec framework
14 which for people who have had to deal with very, very
15 large loads of these types, they do have a longstanding
16 public policy framework that says that, and I'm not on
17 entitlement, I'm on the utility's obligation to serve,
18 does not extend to unlimited quantities.

19 The utility's obligation to serve in
20 Quebec is limited to, and I believe it's 170 Megawatts
21 expansions. And that's in -- it's referenced in TREE IR-
22 1. I can't --

23 THE CHAIRPERSON: Mr. Bowman, you
24 referred to around that range before, yes.

25 MR. PATRICK BOWMAN: Yes, Mr. Chairman.

1 So, -- so, I'm saying -- and my understanding would be
2 that would be the type of public policy consideration
3 that one would want to consider were there a -- a group
4 of aluminum smelters knocking on your door and thinking
5 that -- that they could get power at three point one
6 (3.1) cents, the average industrial rate right now.

7 My other comment though was -- or sodium
8 chlorate. If we're talking about customers that size
9 though, my suspicion would be they would be sophisticated
10 enough to know that power wouldn't stay at 3.1 cents,
11 were they to show up and want 500 megawatts or a 1000
12 megawatts of load. They would effectively soil their own
13 nest.

14 And my third comment in that regard was in
15 terms of aluminum, we have no similar data for sodium
16 chlorate, but, in terms of aluminum that same letter
17 later on references that the median electricity rates
18 paid for aluminium production worldwide is around
19 Canadian 2.4 cents.

20 That does not put Manitoba's 3.1 at the
21 bottom of the barrel. So my suspicion is that sodium
22 chlorate has opportunities in this regard as well. And
23 beyond that I can't comment on the world sodium chlorate
24 markets.

25

1 CONTINUED BY MS. PATTI RAMAGE:

2 MS. PATTI RAMAGE: But you would agree
3 that this industry has grown substantially in Manitoba.
4 In fact, if I put it to you that in the last five (5)
5 years these -- this energy intensive load in Manitoba
6 Hydro has grown by 200 percent in our Province, in that
7 order of magnitude, would you disagree with me?

8 MR. PATRICK BOWMAN: I can't comment on
9 the percentages. I would agree that from hearing
10 comments from Mr. Turner, for example, who is a sodium
11 chlorate producer that they have grown substantially in
12 Manitoba.

13 He comments in his presentation they've
14 shut down production in Louisiana at a plant and brought
15 it to Manitoba. And so I think the point is, in terms of
16 Mr. Lazar's type of analysis, the plant will be
17 somewhere, the question is whether it's in Manitoba or
18 somewhere else.

19 Mr. Turner's case appears to be that by
20 bringing that plant here, he has brought some benefits
21 and jobs to the Province. But in terms of unlimited
22 ability to keep doing that, no I think that the comments
23 made earlier were the relevant comments.

24 MS. PATTI RAMAGE: Well, perhaps maybe
25 you can tell me if you can give me an Undertaking to this

1 effect because that load represents your client base.
2 And I'm wondering if you can look at the increase in load
3 in the last five (5) years and just confirm that my
4 number at the 200 percent is in the correct order of
5 magnitude?

6 Mr. Wiens is correcting me to say 170
7 percent over the last five (5) years?

8 THE CHAIRPERSON: Ms. Ramage, you're
9 saying that the MIPUG group, their load increased 170
10 percent over the last five (5) years?

11 MS. PATTI RAMAGE: Not all of MIPUG, the
12 energy intensive sector within MIPUG.

13 MR. PATRICK BOWMAN: We -- the MIPUG
14 members, the we deal with ten (10) MIPUG members, two (2)
15 of which are sodium chlorate producers. And we have
16 generally had data from the members or agreements with
17 the members, in terms of divulging individual information
18 from them.

19 But I have noted in Manitoba Hydro's load
20 forecast comments to this effect. And I can go and
21 review what's available there and make sure that I don't
22 have any concerns with it and let you know if I do.

23 MS. PATTI RAMAGE: That's all I'm really
24 looking for.

25

1 --- UNDERTAKING NO. 23: MIPEG to confirm the
2 percentage increase in the
3 load of energy intensive
4 industry in Manitoba in the
5 last five (5) years
6

7 CONTINUED BY MS. PATTI RAMAGE:

8 MS. PATTI RAMAGE: And one (1) other
9 note, you also mentioned about the Hydro Quebec having
10 the obligation to serve -- no obligation to serve over
11 175 megawatts. Our information is that is 50 megawatts.

12 And I'm wondering if you could check your
13 information on that, that that was recently updated and
14 the amount was lowered to 50 megawatts?

15 MR. PATRICK BOWMAN: I'm referencing the
16 information we filed in TREE/MIPUG IR-1, this was a
17 letter sent by the Regie in Quebec to the Minister. It
18 followed a March 15th, 2005 requested from the Minister,
19 so I'm assuming it's quite recent. I believe it was
20 probably -- it was in the last six (6) months.

21 And it just -- it references the 175
22 megawatt limit in Hydro Quebec's tariffs as article 307
23 and comments that it's been in place for nearly thirty
24 (30) years. I have no more recent information, but we
25 can look up the tariffs if you like and let you know if

1 they've been changed.

2 But, as recently of, sort of, six (6)
3 months ago that was the limit.

4 MS. PATTI RAMAGE: Yes, if you could do
5 that because I understand at Canput (phonetic) the 50
6 megawatt limit was discussed last week. So we should
7 probably clarify that for the record.

8 MR. PATRICK BOWMAN: Yes, I do note that
9 the letter comments on some ongoing regulatory processes
10 and I will check into that and see what we can find out.
11 If I find that it's not 175, I'll come back and let you
12 know.

13

14 --- UNDERTAKING NO. 24: Confirm the current obligation
15 of Quebec Hydro to its intensive load
16 customers

17

18 CONTINUED BY MS. PATTI RAMAGE:

19 MS. PATTI RAMAGE: Mr. Bowman, you stated
20 in your direct this morning and I might be paraphrasing
21 here but, that you appeared to be saying that you weren't
22 committed to the method by which you determined the
23 export revenue threshold.

24 Well, simply you weren't committed to that
25 method but, you thought that there should -- you were

1 prepared to accept that there could be a case for some
2 type of threshold, is that right?

3 MR. PATRICK BOWMAN: Well, we used the
4 term to describe the basic concepts being put forward by
5 others and we would imagine that -- that people putting
6 forward that case would want to -- would want to try to
7 answer the question at what point have we crossed the
8 threshold. That -- that's the essence of the section.

9 In order to illustrate how that might work
10 we -- we use those percentages, but that's not, as I
11 suggest, that's not an approach that we're -- we're
12 recommending at all.

13 THE CHAIRPERSON: Mr. Bowman, if I could
14 just interject for a second. Rather than just responding
15 to Ms. Ramage, if the information is different than what
16 you have, I wish you'd make a positive response either
17 way, because it seems like a significant piece of
18 information, a hundred and seventy-five (175) versus
19 fifty (50).

20 And Ms. Ramage, if you don't mind, you
21 were saying a bit earlier that the MIPUG energy intensive
22 section had gone up 170 percent over five (5) years.
23 We're not as attuned to all of the numbers as you are.
24 We'd appreciate knowing basically what section or
25 something that can give us some form of quantum to what

1 170 percent represents.

2 MR. ROBERT MAYER: And what is the
3 energy --

4 THE CHAIRPERSON: Intensive section.

5 MR. ROBERT MAYER: -- intensive section.

6 THE CHAIRPERSON: Thank you. Sorry. Ms.
7 Ramage...?

8 MS. PATTI RAMAGE: Mr. Weins can respond
9 to that by way of undertaking.

10 THE CHAIRPERSON: Thank you. We
11 appreciate that.

12

13 --- UNDERTAKING NO. 25: Clarify for the board the
14 definition of 'intensive
15 section' and provide
16 background numbers to
17 quantify the 170 percent
18 increase.

19

20 MR. PATRICK BOWMAN: And similarly, Mr.
21 Chairman, we'll - we'll let you know one way or another
22 if we can find out about the one seventy-five (175)
23 versus 50 megawatt distinction.

24 THE CHAIRPERSON: Okay, Ms. Ramage.

25

1 CONTINUED BY MS. PATTI RAMAGE:

2 MS. PATTI RAMAGE: Again, I'm trying to
3 move through questions but I just wanted to confirm that
4 if the Board was to accept this concept but define --
5 you're not setting the threshold in any way, your
6 evidence here doesn't intend to set that threshold and,
7 in fact, doesn't also intend to define at this point the
8 purpose of anything above the threshold, is that correct?

9 MS. TAMARA MCCAFFREY: I was just going
10 to point out, there's -- there's more than one question
11 within that question but I think Mr. Bowman will answer
12 it accordingly.

13 MR. PATRICK BOWMAN: Maybe I should get
14 you to repeat it.

15

16 CONTINUED BY MS. PATTI RAMAGE:

17 MS. PATTI RAMAGE: I'm going to slow the
18 question down and -- and just say that you're intending
19 to define the threshold today; is that correct?

20 MR. PATRICK BOWMAN: Yes. We -- we've
21 put forward that it is not necessary to define the
22 threshold within the scope of the hearing that's coming
23 up with the cost of service methodology.

24 MS. PATTI RAMAGE: Nor are you attempting
25 to define the purpose for which monies above that

1 threshold could be utilized; is that correct?

2 MR. PATRICK BOWMAN: Well, we certainly
3 put forward some -- some ideas to help illustrate why one
4 would want to think that way, but we're not expecting
5 that that is a -- a core matter for the Board to decide
6 on in this hearing given the scope it set out.

7 MS. PATTI RAMAGE: And despite the fact
8 that neither of those things are essentially to be
9 determined here -- here today, as I understand it, it's
10 the concept we're -- we're talking and that -- I think
11 I've heard you agree with Mr. Williams and I think your
12 own counsel earlier, that in the short term that concept
13 would most likely result in some type of rate increase.

14 Is that correct?

15 MR. PATRICK BOWMAN: Yes.

16 THE CHAIRPERSON: And, again, Mr. Bowman,
17 if I recall, when you say "some type of rate increases"
18 you're talking about rate increases in excess of the ones
19 that they were projecting in the IFF?

20 MR. PATRICK BOWMAN: Well, Mr. Chairman,
21 yes, given that the ones in the IFF reflect expected
22 export revenues under the conditions that would arise --

23 THE CHAIRPERSON: Yes.

24 MR. PATRICK BOWMAN: -- in future years
25 and -- and the basic point is under an assertion that

1 there's too much export revenue and some was taken out
2 the system, it would be higher than that, yes.

3 THE CHAIRPERSON: Thank you.

4

5 (BRIEF PAUSE)

6

7 CONTINUED BY MS. PATTI RAMAGE:

8 MS. PATTI RAMAGE: Now, I'm going to work
9 a -- I'm going to attempt to work a little bit from Mr.
10 Williams' exhibit and I --

11 THE CHAIRPERSON: Ms. Ramage, I'm sorry
12 to interject. Do you have a lot more? I'm not rushing
13 you in any way but I think we're going to take another
14 short break right now.

15 MS. PATTI RAMAGE: I have enough that you
16 -- certainly --

17 THE CHAIRPERSON: Okay.

18 MS. PATTI RAMAGE: -- you don't want to
19 hold out.

20 THE CHAIRPERSON: We'll take another ten
21 (10) minutes.

22

23 --- Upon recessing at 4:10 p.m.

24 --- Upon resuming at 4:24 p.m.

25

1 THE CHAIRPERSON: Okay, Ms. Ramage.

2 MS. PATTI RAMAGE: Okay.

3

4 CONTINUED BY MS. PATTI RAMAGE:

5 MS. PATTI RAMAGE: Before the break, Mr.
6 Bowman, I had taken you to -- to CAC Exhibit 7 and I'm
7 really using this because in my notes I got to the same
8 place Mr. Williams got to, so I can avoid the lead up
9 here.

10 And just focus in on the special drought
11 reserve appropriation of \$50 million. And again, I
12 realize that number is just for context, it's -- there's
13 no magic in the number per se.

14 And my question is that we talked about
15 rates going up. The cost that that 50 million would be
16 drawn out of, would be generation and transmission, is
17 that correct? Because that's what built up -- that's
18 what export revenues are drawn from and that came from
19 export revenues, is that correct?

20 MR. PATRICK BOWMAN: Yes, we didn't go
21 through the specific splitting of whether it's a net off
22 of export revenues or a build up of the cost. But, in
23 any case, we're talking about a generation and
24 transmission amount, yes.

25 MS. PATTI RAMAGE: So you might not be a

1 very popular guy in the room at MIPUG when that \$50
2 million flows into rates in that short term because it's
3 going to go to presumably, the generation and
4 transmission function, is that correct?

5 MR. PATRICK BOWMAN: It would flow into
6 costs in the generation and transmission function, rates
7 always have the extra level of the art of rate design.
8 But, ultimately if you're talking about where it would
9 disproportionately land, in terms of costs, it would be
10 on industrial customers as opposed to others, yes.

11 Although I think it's fair to say, that if
12 it's ultimately being set aside to deal with the impacts
13 of the drought, drought is also a generation related
14 aspect and so the benefits, in terms of not having to
15 bear the drought at that time would flow through the
16 generation and transmission side, particularly, as well.

17 MS. PATTI RAMAGE: And that's what I was
18 going to get to. Because eventually a drought will occur
19 and presumably that fund would have to be drawn down.
20 And using that -- your cost based linkage approach, would
21 I be correct that the drought fund would be drawn down
22 the same way it was built up?

23 That is the fund would be used then to
24 reduce generation and transmission costs that would
25 otherwise have to be collected from domestic customers in

1 the drought situation?

2 MR. PATRICK BOWMAN: Without getting into
3 mechanics and details that are sort of further than are
4 being considered, this amount built up, if it's a cost --
5 if it's an appropriation it would be forecast in terms of
6 an IFF and it would flow through to the cost of service.

7 So it would show up in those categories.
8 Manitoba Hydro doesn't forecast for droughts. So
9 considering the cost of service is based on a forecast
10 basis, you'd never have the reverse transaction show up
11 in a cost of service study because you'd never forecast
12 on that basis.

13 But, when that amount were drawn down,
14 presumably the rules would be set so as to make sure that
15 that those reserves or that the debt that was paid down
16 that one (1) now needs to go back and seek again,
17 ultimately goes to raise Hydro's costs particularly
18 related to the assets which are primarily the generation
19 and transmission or entirely generation and transmission.

20

21 (BRIEF PAUSE)

22

23 MS. PATTI RAMAGE: Something in your
24 evidence and you may have already touched on this this
25 morning, but I just want to make sure, that you referred

1 to the need to develop regulated reserves.

2 And I was just wondering the significant
3 of the word, regulated, or is this morning I may have
4 heard that you didn't want to attach too much
5 significance to names. And I'm wondering if that was one
6 (1) of the names that you weren't intending to attach too
7 much significance to.

8 MR. PATRICK BOWMAN: On that one (1) I
9 think we were using the term in a way that one (1) would
10 want to attach a fair bit of significance to. I'm not
11 going to get too detailed in terms of whether one (1) is
12 talking about a liability, a special protected portion of
13 retained earnings, a trust for it to be maintaining cash,
14 which always could be a mechanical -- a mechanics option,
15 what would be considered, there are utilities who do
16 that.

17 But, the point of regulator means under
18 the jurisdiction of this Board, solidly within the
19 control of this Board and arising as a liability under
20 the direction of the Board and subject to their decisions
21 going forward.

22 I think the point is that, similar to the
23 word, protected retained earnings, as it was used in the
24 Board's Order 101/04, is that this Board would have
25 jurisdiction.

1 So I was using that word carefully to
2 mean, this Board having jurisdiction.

3 MS. PATTI RAMAGE: You're not suggesting
4 though, that it doesn't have jurisdiction over the debt
5 equity ratio right now, are you?

6 MR. PATRICK BOWMAN: The Board does not
7 have jurisdiction over the -- or the Board has
8 jurisdiction over the setting of rates that lead to
9 establishing debt equity ratios.

10 But, in terms of what that equity could be
11 used for in terms of any number of things, this Board
12 does not have that decision -- does not have that
13 authority; that does not come with a normal regulatory
14 framework.

15 A shareholders' equity in a company and
16 its decision to pay dividends, its decision to invest in
17 the company, its decision to pursue subsidiary
18 operations, all of that is typically outside of the rate
19 setting framework; that's within management's and the
20 shareholders' choice with regards to how they manage
21 their utility.

22 The point of regulation is to ensure that
23 despite whatever is decided over there rate -- ratepayers
24 are paying the amounts that are consistent with the
25 lowest cost approach and are not being burdened with

1 whatever is decided over there. But you can't stop, for
2 example, a regulator in Alberta can't stop Atco from
3 paying dividends but it can help establish its debt
4 equity ratio for the purpose of setting rates to make
5 sure their at least cost.

6 So there's -- there's a bit of a
7 distinction in terms of the control that's available to
8 the Board.

9 MS. PATTI RAMAGE: And I'm sorry, I don't
10 think I understood. So are you suggesting greater
11 control over this fund or changing the jurisdiction of
12 the Board?

13 MR. PATRICK BOWMAN: I was suggesting
14 that to the extent that dollars arise that one would want
15 to think about as being protected for this function they
16 would be under the jurisdiction of this Board. I'm just
17 -- to be very clear.

18 MS. PATTI RAMAGE: You've said that
19 repeatedly cost of service has no role in achieving
20 pricing objectives; do you believe this categorically;
21 that is there's no circumstance in which the cost of
22 service would have a role in supporting efficient pricing
23 objectives?

24 MR. PATRICK BOWMAN: I'm having trouble
25 thinking of a case. Our point is simply that there's not

1 a link between a good cost of service study and a good
2 pricing system. One can develop a -- the objectives of a
3 pricing -- most of the objectives of a pricing system
4 with -- with any form of cost of service study and even a
5 good cost of service study can be turned into bad
6 pricing.

7 So the two (2) are -- are effectively
8 delinked. In terms of -- of whether there's any cases
9 where a cost of service study would -- would want to be
10 informed by pricing, that's not something that I've --
11 I've run across or I've seen in -- in -- in the type of
12 professional manuals we're talking about.

13 But I'm always a bit nervous with these
14 absolute, categorical comments.

15

16 (BRIEF PAUSE)

17

18 MS. PATTI RAMAGE: Mr. Chairman, I had
19 provided Mr. Bowman and Mr. McLaren with a copy of what I
20 hoped would become a Manitoba Hydro exhibit and I'm
21 wondering if Ms. Fernandes could distribute and Ms.
22 Dorian, a copy of that document around because I'd like
23 to ask a few questions regarding it to Mr. Bowman and Mr.
24 McLaren.

25

1 (BRIEF PAUSE)

2

3 MS. PATTI RAMAGE: Does everyone have
4 that now?

5 THE CHAIRPERSON: The Panel has it.

6 MS. PATTI RAMAGE: Okay. Could I ask
7 that that be assigned Exhibit MH-26?

8 THE CHAIRPERSON: Very good.

9

10 --- EXHIBIT NO. MH-26: Depiction of the MIPUG
11 recommended approach to export revenues

12

13 CONTINUED BY MS. PATTI RAMAGE:

14 MS. PATTI RAMAGE: What we've done with
15 Exhibit 26 is we've taken the liberty of trying to depict
16 the recommended -- your recommended approach to export
17 revenues on page 16 of your evidence and I'd like to
18 review with it just to see if we have it right.

19 The -- I'd begin by confirming that the
20 threshold that you've used in your evidence and I, again,
21 recognize that it's conceptually. It's a conceptual
22 number. It's not the actual number but I think we'll
23 still get the same idea running through this, is 49
24 million -- is that 49 million -- yeah, 49 million 481
25 thousand, and you'll see that number -- or you don't see

1 that number on this but that's -- that will come up as we
2 go through this chart, but I want to confirm that's the
3 number you have at page 16?

4 MR. PATRICK BOWMAN: I see it on your
5 table at the bottom of -- of column E. I believe that's
6 the same number we were talking, that 50 million type of
7 number. If you -- if you want to give me the footnote I
8 can check it but I'm sure it's the same concept.

9 MS. PATTI RAMAGE: We derived that from
10 page 16 of your evidence; do you recall that?

11 MR. ANDREW MCLAREN: Yes. I can see it
12 on the bottom of page 16 in footnote 37.

13 MS. PATTI RAMAGE: That's right. And
14 it's in column E of -- of this exhibit.

15 And if this method is beyond threshold,
16 the threshold that you recommend it be -- it be placed in
17 a special rate stabilization fund; correct? We've --
18 we've run through that, that's the same as the \$50
19 million number that Mr. Williams referred to.

20 MR. PATRICK BOWMAN: It's the same
21 concept as the 50 million Mr. Williams referred to, yes.

22 MS. PATTI RAMAGE: And any net export
23 revenue other than that which is placed into this fund
24 should be allocated back to the customers classes on the
25 basis of generation and transmission gross cost incurred;

1 correct?

2

3

(BRIEF PAUSE)

4

5

MR. PATRICK BOWMAN: It would be the existing method with -- with all the steps that go with it, splitting on a system load factor and allocating back, but your description is close enough for what we're working through here I believe.

10

MS. PATTI RAMAGE: So can you verify that column C in this exhibit depicts the allocation of total cost using the current method as taken from perspective cost of service study '06?

13

14

MR. PATRICK BOWMAN: If I can avoid digging, can I take it subject --

15

16

MS. PATTI RAMAGE: How about -- it's from Schedule B-1 on page 37. Will you accept that subject to check?

18

19

MR. PATRICK BOWMAN: Yes.

20

MS. PATTI RAMAGE: Next, I'd like you to verify that column D depicts the allocation of generation and transmission costs against using the current method as provided in Manitoba Hydro's response to you in MIPUG/Manitoba Hydro First Round 1-B?

24

25

MR. PATRICK BOWMAN: Yes. I'll take

1 that, again subject to check.

2 MS. PATTI RAMAGE: Right. And that's
3 column D.

4 Now I'm going to take you to column E, and
5 you see the total -- the total at the bottom of that
6 column, and that's the -- the 50 million -- the 49 odd
7 million, 50 million figure that we've discussed as the
8 amount that you'd be -- that'd be set aside for rate
9 stabilisation?

10 MR. PATRICK BOWMAN: Yes.

11 MS. PATTI RAMAGE: So because it has to
12 be collected from current customers we would have to add
13 it to the current revenue requirement; correct?

14 MR. PATRICK BOWMAN: Yes.

15 MS. PATTI RAMAGE: And that has been done
16 in column F; correct?

17 MR. PATRICK BOWMAN: Yes.

18 MS. PATTI RAMAGE: And if we accept that
19 each class should provide revenue equal to 100 percent of
20 cost, column F shows the amount of net export revenues
21 for -- for the moment that would have to be collected
22 from each class prior to net export revenues?

23 MR. PATRICK BOWMAN: Yes.

24 MS. PATTI RAMAGE: Now, I'd like you to
25 consider columns G and H. Can you confirm column G

1 incorporates the preliminary allocation of net export
2 revenue to account for uniform rates?

3 MR. PATRICK BOWMAN: I don't know what's
4 preliminary about it. I think --

5 MS. PATTI RAMAGE: It's the first thing
6 that's done.

7 MR. PATRICK BOWMAN: Yes. It's
8 illustrating uniform rate.

9 MS. PATTI RAMAGE: It's a first charge
10 against net exports. And you can -- can you confirm that
11 column H is the same allocation of residual export
12 revenue as we have in prospective cost of service study,
13 Schedule B, page 37, which depicts the current method,
14 and if you can confirm that subject to check?

15 MR. PATRICK BOWMAN: Yeah. Again, I'll
16 confirm that subject to check. And I -- I would just
17 note again that in terms of the mechanics this is -- this
18 is a \$50 million charge with all of the export revenues
19 as opposed to perhaps allocating only a portion of the
20 export revenues but I think we'll get to the same result.

21 MS. PATTI RAMAGE: Now, in column I we're
22 attempting to depict the residual costs that would have
23 to be collected from each customer class after the
24 allocation of export revenues using the current method if
25 we assume 100 percent RCC.

1 Could you confirm the accuracy of this
2 column in depicting these costs?

3 MR. PATRICK BOWMAN: Yes. It appears to
4 be column F minus columns G and H.

5

6 (BRIEF PAUSE)

7

8 MS. PATTI RAMAGE: And you believe that
9 ultimately the general service large greater than 100 kV
10 should pay no more than its embedded costs based on this
11 type of procedure, correct?

12 MR. PATRICK BOWMAN: No, that's not
13 correct. I believe that this approach, assuming the \$50
14 million arrises, is measuring the costs related to
15 providing service to the GS large greater than 100 kV.
16 Setting rates has other considerations.

17 MS. PATTI RAMAGE: But they should pay no
18 more than 100 percent, in your opinion?

19 MR. PATRICK BOWMAN: No, that's not
20 correct. For all the reasons that we talked about, in
21 terms of why one (1) establishes the zone of
22 reasonableness, why rates change gradually over time, the
23 correct level of rates comes out of the rate design
24 stage, the art of rate design as opposed to the science
25 of cost of service.

1 So this is a fair measurement of costs.
2 This is a step before one (1) gets to rates.

3 MS. PATTI RAMAGE: The next column in the
4 Exhibit is J, and I just ask you to accept this, subject
5 to check, that this depicts the energy class use at the
6 meter in megawatt hours. That would be in the
7 prospective cost of service study at page 38, if you can
8 confirm that?

9 MR. PATRICK BOWMAN: Yes, I'll take that
10 subject to check.

11 MS. PATTI RAMAGE: Now, we get to the
12 rub, is that when we look at column K, we arrive at the
13 embedded cost of providing service to each class per
14 kilowatt hour. And if you could just, subject to check,
15 confirm that the cost for residential under this
16 proposal would be 7.36 cents, for example, general
17 service non-demand 6.79 cents, and for general service
18 greater than 150 kV, 2.68 cents? Can you accept that
19 math subject to check?

20

21 (BRIEF PAUSE)

22

23 MR. PATRICK BOWMAN: Ms. Ramage, we
24 follow all the math in the table. I would want to spend
25 a minute with it, because there is one (1) aspect of it

1 that seems to be giving a slightly different result than
2 I'd expect.

3 It's not a material factor, I think for
4 the purposes of what we're trying to do here. But we'll
5 take the time to check and let you know if we have any
6 concerns with it, because the math certainly seems
7 straightforward.

8 MS. PATTI RAMAGE: Now, subject to your
9 comments about gradualism and rate design, would that be
10 about the average rate that you would expect your clients
11 would pay for energy, under your proposal? Is that what
12 you're proposing?

13 MR. PATRICK BOWMAN: Well, it's a big
14 subject to -- remember that the industrial customer rate
15 today is an average of about 3.1 cents. So this is
16 something like 10 to 15 percent below that level. And
17 within the context of Manitoba rate changes, that a
18 pretty massive difference with, pardon me, the way we
19 tend to define gradualism here.

20 So with a very, very large subject to,
21 that is the measured costs that arise under this and that
22 one (1) would ultimately want to aim for, rates that
23 reflect costs.

24 MS. PATTI RAMAGE: And that's a fair bit
25 lower than the short run marginal costs that are depicted

1 in column L; is that correct?

2

3

(BRIEF PAUSE)

4

5

MR. PATRICK BOWMAN: The rates in column
6 K for large customers are lower than the rates in column
7 L. The mathematical relationship is sound. It's not
8 necessarily a fair portrayal for a couple of reasons, but
9 the mathematical relationship is as you describe it.

10

In terms of the relationship, I'd just say
11 that, first of of all, column L you're describing as a
12 short-run marginal cost, but in terms of -- short-run
13 marginal cost is meant to be near instantaneous price
14 signals, they vary dramatically from time period to time
15 period.

16

This is a high level aggregation and
17 averaged over -- over a period that I'm not sure that it
18 retains, sort of, meaning, in terms of short-run marginal
19 cost the way that most people would understand the term.

20

And -- and, second, the key thing, being
21 Column K, is the rates that are paid for people's use of
22 the entire system, including all functions. As we -- as
23 we heard earlier in this hearing, when you talk about
24 efficient rates for bulk power, you would talk about the
25 rates people are paying for the bulk power system.

1 For example, in the row for residential
2 it's listed at seven point three six (7.36) cents. But
3 about four (4) cents of that is paying for the
4 distribution system.

5 In any of these other jurisdictions where
6 you're trying to signal efficiency via markets and
7 marginal costs, people would pay that four (4) cents,
8 plus they would pay for the generation system in the
9 marginal cost rates.

10 So the fact that we've mixed together
11 these functions results in that type of comparison being
12 somewhat misleading.

13 MS. PATTI RAMAGE: But would you agree
14 that that's -- that Column L is what Manitoba Hydro would
15 get in the -- approximately in the opportunity market?
16 That's -- and I can draw your attention to CAC/MSOS/I-
17 11(g) and that's where those figures are derived. Do you
18 disagree?

19 MS. TAMARA MCCAFFREY: Sorry, what was
20 the number?

21 MS. PATTI RAMAGE: CAC/MSOS/I-11(g).

22 MR. PATRICK BOWMAN: The numbers in the
23 last column are opportunity market-based prices, having
24 looked up the IR at the break, highly aggregated to be
25 averaged over the course of a year. I don't know that

1 there's any period where Manitoba Hydro is actually
2 getting those prices.

3 It's getting prices that -- that go quite
4 all over the place. But highly aggregated over the
5 course of a year, that's what -- that's the averages I
6 assume, without having necessarily checked all the math.

7

8 CONTINUED BY MS. PATTI RAMAGE:

9 MS. PATTI RAMAGE: Okay. Now, I'll move
10 on to something that I enjoy a little more than running
11 through those kind of tables. This morning you cited,
12 and in your evidence at -- or in your response to
13 CAC/MIPUG-3, which you might want to turn to, you cited
14 the NARUC 1992 report as precedent for excluding
15 functions other than generation and transmission as a
16 basis for allocating net export revenues?

17 MR. PATRICK BOWMAN: I cited that NARUC
18 had a manual that provided first guidance on first
19 principles, yes. 1992 was the more recent update to it.

20 MS. PATTI RAMAGE: If anyone wants to see
21 what it looks like, Mr. Wiens carries it with him
22 everywhere.

23 MR. PATRICK BOWMAN: Yes, I think Mr.
24 Williams has the wrong bedtime reading for this hearing.

25

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

(BRIEF PAUSE)

MS. PATTI RAMAGE: If I could ask you to turn to that IR; do you have it in front of you?

MR. PATRICK BOWMAN: Yes.

MS. PATTI RAMAGE: And if you could read into the record on page 2 the -- you've quoted page 31 of -- of the NARUC manual, and if you could read the paragraph beginning, "other operating revenues..." and ending with "other operating revenues."

MR. PATRICK BOWMAN: This is a quote from the section of the NARUC manual that reviews the steps in developing the utility's revenue requirement for the purposes of contributing towards the cost of service study.

At page 31 it notes:

"Other operating revenues includes all revenues received from sources other than the retail sales of electricity. These amounts are collected by a utility for other services rendered. An example of these revenue sources is when a utility may provide space on its transmission and distribution poles for the use of cable television lines and

1 receive the revenues therefrom in the
2 form of rental payments. In addition,
3 revenues collected from non-firm
4 opportunity sales or coordination type
5 sales are normally treated in the same
6 manner as other operating revenues."

7 MS. PATTI RAMAGE: Now, the example cited
8 by NARUC is rental revenues from providing space on its
9 transmission and -- on transmission and distribution
10 poles to cable and television companies. To get a
11 flavour of the materiality of this example, do you know
12 how much annual revenue comes to Manitoba Hydro from
13 renting pole space to other carries?

14 MR. PATRICK BOWMAN: No.

15 MS. PATTI RAMAGE: If I told you it was
16 less than \$3 million annually, would you accept that,
17 subject to check?

18 MR. PATRICK BOWMAN: I'm not sure how I
19 would check it, but I will accept it.

20 MS. PATTI RAMAGE: I think you could
21 check it with this Board, but...

22 Would you agree that \$3 million annually
23 is pretty small when compared to 5 to \$600 million from
24 export sales?

25 MR. PATRICK BOWMAN: Yes.

1 MS. PATTI RAMAGE: Going on, the quote
2 refers to revenues collected from non-firm opportunity
3 sales or coordination type sales. And it says they are
4 normally treated in the same manner as other operating
5 revenues.

6 I'm wondering, does this sound like it's
7 referring to off system sales occurring at much higher
8 than embedded costs and which are nearly half of the
9 Utility's generation and transmission costs?

10 Do you -- do you honestly believe that
11 that's what they were contemplating in the 1992 manual?

12 MR. PATRICK BOWMAN: I can't say what
13 they were contemplating but I'm noting that the manual
14 setting out the first principles for thinking about
15 revenues of this type, they do note that they're normally
16 treated in the same manner as other operating revenues.

17 We note from the NERA survey that they're
18 not always treated in the same manner as other operating
19 revenues. Sometimes they're not credited back to
20 customers, such as, as we said, Idaho Power which does
21 not credit a portion of the export revenues back to
22 customers via their rates. I'm not sure what it does
23 with them but it doesn't credit them back to customers
24 via their rates.

25 So the -- but looking at the remainder of

1 the NERA survey, which is intended to be utilities as
2 close as one can find to Manitoba Hydro, all of them
3 would otherwise fit this -- this description for the
4 export revenues that are included in the cost of service
5 study.

6 MS. PATTI RAMAGE: And the -- the second
7 part of the quote, and I won't get you to read it in
8 again, but it says to the effect that retail service
9 customers are normally given credit for -- for these
10 through a reduction to their revenue requirement.

11 Would you agree this quote doesn't say
12 anything specific about how the reduction should be
13 functionalised and it should just go to revenue
14 requirement is what it says?

15 MR. PATRICK BOWMAN: Well, it goes on to
16 say:

17 "Since they are produced through the
18 use of plant or utility personnel, the
19 expenses of which are borne by the
20 Utility's retail service customers."

21 When one moves from this manual into the
22 sections on functionalization, it would say one would
23 look to the functions in terms of allocating the costs
24 and revenues. So I think read in context with the
25 functionalization section it's quite clear.

1 MS. PATTI RAMAGE: I'm getting to the
2 last section.

3 Mr. Bowman, if I heard you correctly this
4 morning, you said you didn't believe that any weighting
5 in the cost of service study should be given to other
6 than median water flow conditions.

7 Is that correct?

8 MR. PATRICK BOWMAN: I believe my comment
9 was that in preparing a cost of service study it should
10 be internally consistent and that if the revenue
11 requirement is based on median water flows, which is the
12 longstanding approach and is sensible, the remainder of
13 the cost of service study would similarly be based on
14 those types of water flows.

15 MS. PATTI RAMAGE: Can I put it to you
16 that the revenue requirement on which the cost of service
17 study is based is derived from Manitoba Hydro's IFF and
18 you'll acknowledge that while it's true that in the first
19 year in the IFF, the first forecast year is based on
20 median water flows, all years beyond that are based on
21 the impacts of the entire history of water flows.

22 Is that not correct?

23 MR. PATRICK BOWMAN: It's the first year
24 that we do the peak costs on. We don't --

25 MS. PATTI RAMAGE: But the --

1 MR. PATRICK BOWMAN: -- do ten (10)
2 years.

3 MS. PATTI RAMAGE: -- but the first year
4 revenue requirement is derived by looking at the -- the
5 entire period?

6 MR. PATRICK BOWMAN: I'm not sure I
7 understand, Ms. Ramage. We've been told that the revenue
8 requirement in the first -- and I've generally understood
9 it to be the first two (2) years of the IFF, is based on
10 median water flow conditions representing the
11 Corporation's best forecast as to what water conditions
12 will arise.

13 Beyond that in the cost of -- in the IFF,
14 in years 3 through 10, it uses mean (sic) average water
15 conditions. So it's -- but it's those first years are
16 the ones that the cost of service study analysis is done
17 on.

18

19 (BRIEF PAUSE)

20

21 MS. PATTI RAMAGE: You said I think in
22 the first ten (10) years median. If I put it to you that
23 it's the eighty -- it's eighty-six (86) years average
24 water flows that it looks at and the impacts from same,
25 does that start to -- does that sound correct? Averaging

1 the financial impacts from those eighty-six (86) years?

2 MR. PATRICK BOWMAN: I'm -- I'm not sure
3 I understand the question. IFF forecast we understand is
4 based on the median water flows during the period of the
5 time for which a cost of service is based. It's one (1)
6 set of conditions and it's one (1) internally consistent
7 revenue requirement.

8 MS. PATTI RAMAGE: I don't think I'm the
9 one to try to clarify this with Mr. Bowman. So we'll
10 straighten that out afterwards and that concludes my
11 cross-examination.

12 THE CHAIRPERSON: Thank you, Ms. Ramage.
13 Given that Mr. Anderson is not here I suppose that only
14 leaves you, Mr. Peters.

15 MR. BOB PETERS: Thank you.

16 THE CHAIRPERSON: I think we will take a
17 short break so that we can be fully focussed on your
18 questions as well.

19 MR. BOB PETERS: Thank you.

20 THE CHAIRPERSON: Ten(10) minutes.

21

22 --- Upon recessing at 4:50 p.m.

23 --- Upon resuming at 5:10 p.m.

24

25 THE CHAIRPERSON: Okay, Mr. Peters, we're

1 hanging on your every word.

2 MR. BOB PETERS: Thank you very much, Mr.
3 Chairman.

4

5 CROSS-EXAMINATION BY MR. BOB PETERS:

6 MR. BOB PETERS: Good afternoon, Mr.
7 Bowman, Mr. McLaren. I'm hoping that we keep our
8 discussions to the afternoon and your cooperation will be
9 appreciated.

10 Mr. Bowman, you referenced to the Board
11 and to other parties on a few occasions that you were
12 quite an unpopular person at a MIPUG meeting when you had
13 to talk about rate increases; do you recall that?

14 MR. PATRICK BOWMAN: Yes.

15 MR. BOB PETERS: I know how you feel. So
16 I will do my best to keep us moving.

17 Gentleman, is there any dispute that there
18 is an ever increasing unit market value of net exports?

19

20 (BRIEF PAUSE)

21

22 MR. PATRICK BOWMAN: Yes, I believe there
23 is some dispute. I believe there was some comments that
24 some of the markets that are available right now or in
25 the last little while are due to very high spikes in

1 natural gas that are uncharacteristic and that aren't
2 expected to continue.

3 But in general to the extent that
4 commodities typically increase over time with
5 inflationary factors and that sort of thing and in
6 general knowing that exports are being sold as a
7 replacement for utilities in the United States using
8 commodities such as gas or coal to provide their own
9 electricity, I think it's fair that there's a long-term
10 upward trend that would -- would be expected.

11 MR. BOB PETERS: Thank you for that.
12 You'd also then agree that there is a long-term trend for
13 the unit costs of generation and transmission in Manitoba
14 to remain relatively stable?

15 MR. PATRICK BOWMAN: Well, for the unit
16 costs from any given facility to remain relatively
17 stable. But the point has been that outside of special
18 additions or new facilities being added on an overall
19 basis the system is -- is being grown.

20 New resources are being put in place, be
21 they demand side resources or supply side resources and
22 they would typically come at higher than average costs
23 because as one moves along the -- the best and the
24 cheapest and the lowest hanging fruit has been -- has
25 been plucked.

1 MR. BOB PETERS: All right. So subject
2 to new generation facilities being added the generation
3 and transmission costs that are presently embedded
4 through the cost of service study would be expected to
5 remain relatively stable?

6 MR. PATRICK BOWMAN: Yes. Yes, that's
7 fair.

8 MR. BOB PETERS: And it follows from
9 that, does it not, that the gap then between the market
10 value of the net exports and the costs of the generation
11 and transmission there's a gap there and that gap is
12 growing over time, over the long-term?

13 MR. PATRICK BOWMAN: Well, I don't
14 believe that would be the case when we're talking about
15 expanding a system to capture exports. The point would
16 be to the extent that that gap exists and grows and we
17 can bring online new resources that are -- that are
18 higher cost than the current resources but are lower than
19 the export revenues, we would continue to add those
20 resources.

21 So, the -- the supply being brought on
22 line for exports would also tend to go up given that
23 we're bringing on new supply to continue to do that.

24 MR. BOB PETERS: Do you think that the
25 two (2) will then narrow as opposed to stay apart?

1 MR. PATRICK BOWMAN: I want to be careful
2 about what -- what we're talking about. The average cost
3 on the system is a mixture of what was put in place old
4 and what is being put in place new. That average will
5 always, even when you add resources, will always be
6 damped by the extent to which you have old. So it's not
7 going to climb particularly fast.

8 So when you're talking about exports
9 they're inherently an incremental service to Manitoba
10 Hydro. So when new resources can be put in place that
11 are cheaper than exports, we would expect Manitoba Hydro
12 would want to be doing that.

13 If that gap grows such that exports go up
14 we would expect that Manitoba Hydro would want to be
15 finding the next new resource they can put in place in
16 order to capture those exports.

17 So the two (2) would -- would generally be
18 expected to be linked for a utility that's trying to
19 capture margins on the export.

20 MR. BOB PETERS: Other than thermal and
21 some wind what new additional generation has been added
22 since Limestone?

23 MR. PATRICK BOWMAN: It's an important
24 question, Mr. Peters, and it's something we -- we took
25 some time to -- to consider. The itemizing --the

1 resources that have been put in place since Limestone is
2 -- is not intuitive or easy because we're not talking
3 about major additions; that's clear.

4 But at the same -- we've also heard quite
5 clearly that we're not talking about export revenue
6 quantities that have grown and not talking about export
7 revenues have tended to shrink since the early '90's.
8 We're talking about exports that have tended to be on a
9 normal water basis about -- about 10,000 Gigawatt hours
10 despite ongoing growth in Manitoba Hydro's domestic load.

11 So the -- the simple conclusion is we're
12 talking about a lot of little resources being put into
13 place. A lot of little system improvements. But
14 rerunning Kelsey is one that was talked about but there
15 has also been other -- we've -- we've heard of other
16 system supply enhancements that have been considered.
17 DSM has been talked about.

18 Life extension on thermal facilities. If
19 one goes back to the point where Limestone was -- was
20 brought into service or that -- that type of period the
21 long-term plans would have reflected that thermal
22 facilities like Selkirk being retired. Instead, we've
23 talked about life extension by converting it to gas and -
24 - and Brandon coal having a, from my understanding, a
25 life extension beyond what was originally planned.

1 And, of course, a fair number more when
2 one looks forward in terms of refurbishing of Point De
3 Bois (phonetic) which was a fairly high priced capital
4 project in the 2004 GRA filing we noticed.

5 Wuskwatim and potentially -- perhaps
6 further wind and further northern generation.

7 MR. BOB PETERS: I take it from your
8 answers that you're not -- you're telling the Board that
9 the problem or the change in circumstances that Manitoba
10 Hydro alleges and brings before the Board are not such
11 material changes that you think there needs to be a
12 solution crafted to address it at this point in time?

13 MR. PATRICK BOWMAN: No, that's not
14 correct. We are not saying that within the materials
15 available within this hearing that one can critically
16 assess the aspects that Hydro is talking about as the --
17 the problem they were trying to address with their cost
18 of service solutions.

19 Our focus has been on the cost of service
20 solutions, the merits of the -- of the solutions proposed
21 and what extent they would link to those problems if
22 those problems in fact do exist.

23 Analysing the problems is somewhat of a
24 different exercise that's not a cost of service context.
25 It's a revenue requirement, a rate design context. So

1 we're -- that's why we sort of used an illustrative type
2 of concept for the threshold as opposed to a number or
3 defining it.

4 MR. BOB PETERS: There's no cost of
5 service problems and methodology problems at this point
6 in time from your perspective?

7 MR. PATRICK BOWMAN: Well, we've had --
8 we've commented on the other changes to the cost of
9 service study that are proposed. Some of them have
10 merit, particularly in a context where -- where people
11 have found a way to deal with the marginal cost of energy
12 issue, with the SAP rates, marginally weighting energy by
13 time period is an improvement.

14 The others -- others we didn't necessarily
15 strike as particular improvements. But we were not
16 struck by the arguments made to support in this round
17 changing from the generation transmission allocation of
18 export revenues being any different than -- than
19 effectively -- that export revenues had grown beyond a
20 threshold, and that was not to us a compelling cost of
21 service issue, it was a revenue requirement issue.

22 MR. BOB PETERS: Thank you, Mr. Bowman.
23 I do recall Mr. McLaren's evidence direct through Ms.
24 McCaffrey on that point, on the points you raise. So I'm
25 not going to go back there. Let me come at it this way

1 then.

2 In terms of the quantum of net export
3 revenue there are no problems in the cost of service
4 study at this point in time?

5

6 (BRIEF PAUSE)

7

8 MR. PATRICK BOWMAN: Maybe I'll just get
9 you to repeat the question so I'm sure I'm answering it,
10 but I...

11 MR. BOB PETERS: Is it -- do you want the
12 Board to take from your evidence that in terms of the
13 increasing quantum of net export revenues, that doesn't
14 pose a problem that the current cost of service study
15 can't already handle in its existing methodology?

16 MR. PATRICK BOWMAN: Yes, that's fair,
17 with regard to the export.

18 MR. BOB PETERS: I thought I qualified it
19 to the net export revenue, Mr. Bowman. So I think you
20 understood that to be the -- the question.

21 You have also made it clear that if
22 Manitoba Hydro thinks there is a problem by having a too
23 large of quantum of net export revenue, the tool to
24 address the problem does not lie in the cost of service
25 study.

1 MR. PATRICK BOWMAN: Yes.

2 MR. BOB PETERS: The tool according to
3 your evidence lies in rate design.

4 MR. PATRICK BOWMAN: The tool with
5 respect to the problem put forward about poor price
6 signals lies in rate design. The tool with respect to
7 the problem put forward by Hydro with respect to too much
8 export revenues lies within revenue requirement. Neither
9 are cost of service issues inherently though.

10 MR. BOB PETERS: Under the current
11 methodology used for the cost of service study, would the
12 general service large customers continue to get an
13 increasing benefit of the increasing net export revenue?

14

15 (BRIEF PAUSE)

16

17 MR. PATRICK BOWMAN: No. And the reason
18 is because the cost of service study approach that's
19 there today, we are saying, has -- has limits in terms of
20 the export revenues that -- that may be calculated to be
21 excess.

22 The export revenues that are not
23 calculated to be excess are effectively, to the extent
24 they're credited back, compensating customers for the
25 amounts customers are paying for assets that are not

1 serving them.

2 To the extent that exports grow the -- the
3 excess would grow. The portion that would be in the cost
4 of service study would only be the portion that's related
5 to compensating customers for the assets that they're
6 paying for.

7 MR. BOB PETERS: Well, I think we're now
8 mixing -- mixing the fruit up a little bit here with the
9 apples and oranges, Mr. Bowman, and maybe my questions
10 wasn't clear.

11 But under the current, existing, PUB
12 approved cost of service methodology would increasing the
13 quantum of net export revenues continue to provide
14 general service large customers with a benefit by way of
15 a higher revenue to cost coverage ratio?

16 MR. PATRICK BOWMAN: I am concerned about
17 mixing apples and oranges so if I can just make it really
18 clear. Under the current cost of service methodology if
19 one retained that methodology and also retained the
20 current revenue requirement setting method, in light of
21 exports passing notionally a threshold but no effort was
22 made to define the threshold or to take exports out of
23 the system and one trundled along happily with both of
24 those operating status quo, despite exports becoming
25 windfalls and they were credited back through the cost of

1 service study the customers that would see the largest
2 benefit would be industrials.

3 MR. BOB PETERS: Do I take from that
4 answer that you're -- you're going to far as to perhaps
5 suggest to this Board that they do consider, in a revenue
6 requirement hearing, establishing a threshold so that
7 those purported concerns from Manitoba Hydro will have a
8 forum to be addressed?

9 MR. PATRICK BOWMAN: Yes. And if I just
10 might add one thing to my last response, I'm sorry. I
11 said the largest beneficiary would be industrials, and I
12 would note that that's on a percentage basis. All
13 customers would benefit similarly on a kilowatt hour
14 basis. But it's the percentages where those concerns
15 seem to be focussed and that's where the industrials
16 would benefit the largest amount.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Mr. Bowman, Mr. McLaren,
21 the concern raised by Manitoba Hydro about the increasing
22 quantum of net export revenues, you're telling the Board
23 that can be addressed outside the cost of service study;
24 correct?

25

MR. PATRICK BOWMAN: I think we're

1 effectively telling the Board that can only appropriately
2 be addressed outside of the cost of service study.

3 MR. BOB PETERS: And in your view the one
4 tool that would be the most appropriate to deal with the
5 concern that's been espoused by Manitoba Hydro would be
6 an inverted rate structure?

7 MR. PATRICK BOWMAN: No. It's late in
8 the day so let me just try to work my way through it.
9 When the case is made by Manitoba Hydro that changes are
10 needed to the cost of service study there are effectively
11 two (2) independent cases being made.

12 One (1) is that there's too much export
13 revenue being credited back and the second is that there
14 are poor price signals. I'm keeping those quite distinct
15 because if one takes the price signals argument to its
16 extreme the only way you can solve the price signals
17 argument without -- without changing the rate design is
18 by effectively going right to market rates and throwing
19 out the cost of service study altogether. So we're
20 really talking about two (2) different things.

21 Price signals, to the extent that those
22 arise, one would talk about finding ways to improve the
23 efficiency signals sent to customers via their rates. It
24 can be dealt with in a -- a relatively constrained
25 framework in rate design.

1 Lots of utilities have gone on and do it.
2 It's very practical. It takes a bit of work. There's a
3 lot of devil in the details but it can be solved.

4 The other problem that is then more the
5 core nut that one must consider cracking is the extent to
6 which there is a -- a problem posited that there is too
7 much export revenue and so the cost of service -- and so
8 we have to deal with it within the four (4) walls of the
9 cost of service study and what must yield is core
10 principles. First principles of doing cost of service.

11 We thought that was backwards. To the
12 extent that there's a problem of that type don't yield on
13 the core first principles, yield on the extent to which
14 you have to see yourself bound within the four (4) walls
15 of the cost of service study.

16 Look to the revenue requirement and where
17 that properly resides as a solution. So I'm just -- I'm
18 just being careful about the rate design versus -- versus
19 too much export revenues.

20 MR. BOB PETERS: No, I appreciate you're
21 making that point clear for the Board. Gentlemen, in
22 your -- in your direct evidence through Ms. McCaffrey,
23 you talked about your experience in preparing and working
24 with cost of service studies.

25 I don't have a transcript for that yet but

1 do I take it from that that you haven't actually prepared
2 cost of service studies for utilities but you have
3 certainly analysed them for a variety of utilities?

4 Mr. McLaren, is that -- is that correct?

5 MR. PATRICK BOWMAN: Perhaps we can each
6 deal with it separately if you'd like. No, that's not
7 correct. I have prepared cost of service studies for the
8 Northwest Territories Power Corporation that was put
9 before their Board in their 2001/3 GRA and was tested at
10 which I appeared as an expert for the Corporation. Their
11 -- their sole witness on cost of service.

12 Mr. McLaren can deal with his own.

13 MR. ANDREW MCLAREN: Similarly, I was
14 involved in certain aspects, not to the same extent as
15 Mr. Bowman, but certain aspects of the same cost of
16 service study preparation for the Northwest Territories
17 Power Corporation and, subsequently, helping them run the
18 same cost of service model for their own internal
19 financial planning purposes to understand impacts of
20 different sorts of operating expense or load
21 characteristic changes.

22 MR. BOB PETERS: And throughout your
23 preparation and appearances on that cost of service
24 study, you certainly have looked at a number of others
25 and obviously read a number of manuals that you've talked

1 about; correct?

2 MR. PATRICK BOWMAN: Yes.

3 MR. BOB PETERS: And when it comes down
4 to it, as I asked Mr. Harper, you could probably provide
5 reasonable arguments on each side of various cost of
6 service issues that come up from time to time; would you
7 accept that that could happen?

8 MR. PATRICK BOWMAN: Well, we could form
9 arguments that sound cogent on each side. Ultimately,
10 though, we've been asked to assess Hydro's one (1) system
11 and the extent to which the cost of service study is --
12 is reflecting that system, as best we understand it. So,
13 no, I think we would come out with one (1) response.

14 MR. BOB PETERS: You're not suggesting --
15 you're not agreeing then that -- that various
16 methodologies can have equal merit?

17

18 (BRIEF PAUSE)

19

20 MR. PATRICK BOWMAN: No, I would say that
21 in undertaking an exercise people like us are asked to
22 consider the various methodologies and determine the one
23 that has more merit given a set of factors that we need
24 to be able to enumerate when we're explaining why one --
25 one methodology has more merit.

1 MR. BOB PETERS: Well, if -- if Mr.
2 Harper was asked the same assignment as you, is it
3 possible that the two (2) of you would come up with
4 different approaches?

5 MR. PATRICK BOWMAN: Yes.

6 MR. BOB PETERS: Why is that?

7 MR. PATRICK BOWMAN: Because each of us
8 would -- may give different weight to various factors
9 within the -- the facts as to how a utility's system is
10 designed, built and operated.

11 MR. BOB PETERS: So while those of you
12 from Intergroup may have a different position from those
13 from Econalysis, you would agree that there is room for
14 professional disagreement?

15 MR. PATRICK BOWMAN: Absolutely.

16 MR. BOB PETERS: And that's because it
17 may be that the various methodologies can have equal
18 merit?

19 MR. PATRICK BOWMAN: No, it would be
20 because each of the professionals came up with a
21 different opinion as to how the system is built, designed
22 and operated and how one best reflects that in cost
23 causation and a cogent argument towards their end.

24 MR. BOB PETERS: When -- when you receive
25 the assignment, in this case I think you told Ms.

1 McCaffrey that you -- that MIPUG was retained -- I'm
2 sorry, that Intergroup was retained by MIPUG to review
3 the filing and to provide your advice on it?

4 MR. PATRICK BOWMAN: Yes.

5 MR. BOB PETERS: Can we take from that
6 answer that the issues and the concerns that have arisen
7 in the filing - and which are included in your evidence -
8 are issues that are then raised by Intergroup?

9 MR. PATRICK BOWMAN: Yes.

10 MR. BOB PETERS: And they're not issues
11 that came to you from MIPUG reviewing the materials and
12 asking you to comment on the specifics of those issues
13 that they may have identified?

14 MR. PATRICK BOWMAN: No, I wouldn't agree
15 with that. To the extent that people running a company
16 want to take the time to review a Manitoba Hydro filing,
17 they come up with questions and concerns that they would
18 raise with us and we would assess those and come up with
19 our opinion on those.

20 And to the extent that they seemed
21 relevant to put before the Board, we would include in our
22 evidence.

23 MR. BOB PETERS: So while you're here as
24 expert witnesses, do you consider yourselves to be
25 independent of your client, or do you consider yourselves

1 to be here advocating on behalf of your client?

2 MR. PATRICK BOWMAN: We're here as
3 independent expert witnesses.

4 MR. BOB PETERS: Would you be giving the
5 same advice that you're giving this Board to --
6 regardless of who your client was?

7 MR. PATRICK BOWMAN: We may not be giving
8 the same advice because we may not have looked at the
9 same scope of issues. The scope of issues we looked at
10 were those that were of interest to industrial customers.

11 But in regards to the issues we were asked
12 to assess, we applied the same principles and
13 methodologies that we would apply, whether we were
14 working for utilities, which we routinely do, or whether
15 we were working for commercial customers, which we do in
16 one (1) case, or whether we were working for industrials.

17 MR. BOB PETERS: Let me ask you another
18 question then: If your retainer was from the Province of
19 Manitoba to give them advice respecting Manitoba Hydro
20 net export revenues and what to do with them, would you
21 be giving them the same advice as you've given in this
22 Hearing?

23 MR. PATRICK BOWMAN: I would expect them
24 to scope out the issues that they would like us to
25 assess. Were they to scope out the issues that they

1 would like us to assess the same as MIPUG's, in terms of
2 the appropriate way to deal with export revenues, I would
3 expect we would come up with the same advice.

4 But without having been given that
5 retainer, I can't necessarily say what the scope of
6 issues they would put before us are.

7 MR. BOB PETERS: Okay. I'll take the
8 last part of your qualification as fair, I mean it was a
9 hypothetical issue posed to you.

10 Another issue while we're on that topic
11 is: Intergroup also is retained, on occasion, I
12 understand, by Manitoba Hydro?

13 MR. PATRICK BOWMAN: On other files, yes.

14 MR. BOB PETERS: Why didn't they engage
15 you on this file?

16 MS. TAMARA MCCAFFREY: You might have to
17 ask Ms. Ramage that one, Mr. Peters.

18 MR. BOB PETERS: Fair comment, Ms.
19 McCaffrey.

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: But, you wouldn't
23 expect, from your position, that Manitoba Hydro would be
24 interested in receiving your advice on this particular
25 issue; would that be fair?

1 MR. PATRICK BOWMAN: We wouldn't expect
2 the retainer. We wouldn't accept the assignment, sir.
3 We're engaged with MIPUG on matters of regulations and
4 rates with respect to Manitoba Hydro.

5 MR. BOB PETERS: All right. And does
6 that put you in any conflict position, Mr. Bowman, when
7 it comes times to your retainers from Manitoba Hydro?

8 MR. PATRICK BOWMAN: No. And I can give
9 you a couple of reasons.

10 MR. BOB PETERS: Please.

11 MR. PATRICK BOWMAN: First of all, we do
12 not work in the same areas for Manitoba Hydro as we do
13 for the Manitoba Industrial Power Users Group.

14 We're involved with Manitoba Hydro
15 primarily in matters of socio-economic impact assessment,
16 at this point, related to new developments. But also on
17 some occasions related to past developments.

18 In that regard, first of all,
19 professionally it is not me who does that work. I am not
20 primarily engaged on any of those assignments.

21 The second thing is that we've work for
22 both Manitoba Hydro and MIPUG for basically since the
23 start of regulation in this jurisdiction and since
24 initially taking on MIPUG as a client.

25 And both those clients are aware of that,

1 and we are very clear about the areas in which we work
2 for each of them.

3

4 (BRIEF PAUSE)

5

6 MR. BOB PETERS: Okay. Thank you. Let
7 me -- let's get back to cost of service principles. And
8 would you agree with me that there are no specific
9 principles in the cost of service study as to how to deal
10 with net export revenue?

11 MR. PATRICK BOWMAN: No.

12 MR. BOB PETERS: I take it you don't
13 agree with me, you're going to say that cost of service
14 study methodology can handle a cost offset, as well as it
15 can handle an actual cost to the utility?

16 MR. PATRICK BOWMAN: Yes.

17 MR. BOB PETERS: And there's no precedent
18 that you can -- that you have in terms of how the net
19 export revenue would be allocated in other jurisdictions,
20 the same as it is here in Manitoba; is that also true?

21 MR. PATRICK BOWMAN: No. To the extent
22 that one can find a precedent that is as close as
23 possible, no two (2) situations are exactly alike. But,
24 to the extent that one can find a situation that's as
25 close as possible, there's evidence before the Board in

1 the form of a survey done by NERA of ten (10) similar
2 utilities and to the primary matters on which we are
3 dealing with today, all of them effectively treat export
4 revenues the same way Manitoba Hydro does for every
5 export dollar that shows up in the cost of service study,
6 the same way Manitoba Hydro's existing approach does.

7 MR. BOB PETERS: Okay. And the
8 qualification there, Mr. Bowman, is that not necessarily
9 every dollar of export revenue makes it to the cost of
10 service study in those jurisdictions?

11 MR. PATRICK BOWMAN: That's correct.

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: There's been discussion,
16 Gentlemen, about the choice of cost to use in cost of
17 service studies and I gather that your advice to the
18 Board is, Stick with the embedded costs of the Utility
19 and use those in the cost of service study.

20 Mr. McLaren, Mr. Bowman, is that -- is
21 that correct?

22 MR. PATRICK BOWMAN: Yes. Our advice to
23 this Board is that having Manitoba Hydro prepare an
24 embedded cost of service study on a consistent basis with
25 their accounting costs is a useful tool and should be

1 undertaken.

2 MR. BOB PETERS: You don't see a place in
3 the cost of service study, though, for an export class;
4 correct?

5 MR. PATRICK BOWMAN: Well, I noted Mr.
6 Peters that developing classes is one of the more
7 judgmental areas of the cost of service study and that in
8 our review of developing an export class, we are -- we
9 are relatively indifferent, assuming it is not -- the
10 results are not intended to be used for certain purposes
11 for which they would -- would not be the right tool.

12 MR. BOB PETERS: That's a cryptic way, in
13 my mind, of saying you don't want to use a cost of
14 service study to price your export -- export product.

15 MR. PATRICK BOWMAN: That's one of the
16 things you would not want to use a cost of service study
17 for.

18 MR. BOB PETERS: All right. But -- but
19 one of the other reasons you're concerned about having an
20 export class in the cost of service is that in the cost
21 of service that's using embedded costs, you don't think
22 embedded costs are the right measure of -- of costs that
23 are used to -- to gain the export revenue.

24 MR. PATRICK BOWMAN: That's correct.

25 MR. BOB PETERS: You would rather see --

1 and you consider the export revenue is gained, I suppose,
2 at the margins of Manitoba Hydro's generation
3 capabilities and, therefore, should attract probably
4 something closer to marginal costs.

5 MR. PATRICK BOWMAN: I think that's
6 pretty fair. It's -- it's pretty close.

7 MR. BOB PETERS: But you don't recommend
8 to this Board that Manitoba Hydro do a cost of service
9 study using marginal costs.

10 Why is that?

11 MR. PATRICK BOWMAN: Because marginal
12 cost -- costs -- sorry, let me go back.

13 There are two (2) parts to that that I'll
14 comment on. The first one is in any cost of service
15 study that one is dealing with, a key concern is that
16 it's defensible and credible and internally consistent.
17 And embedded cost of service study that's consistent with
18 embedded costs, in terms of the revenue requirement that
19 comes into it, is an incredible useful tool that should
20 be undertaken in Manitoba.

21 Separately, one theoretically can try to
22 do credible defensible marginal cost studies. We have
23 not seen these to be particularly pervasive. We have not
24 found them, when we've run across the concept, to be
25 particularly useful or practical. They're extremely

1 difficult to put in place. And most jurisdictions, once
2 they've considered the difficulties of putting them in
3 place, back away very quickly. And that's whether it's
4 the 1970's or -- or the 1990's.

5 If anything, the evolution of time has
6 suggested that one -- the reasons for wanting to do a
7 marginal cost of service study have declined with time
8 because you can achieve the objectives -- marginal costs
9 are inherently related to efficiency objectives and you
10 can achieve those in your rate design without having to
11 go through those efforts, which are -- can be high.

12 MR. BOB PETERS: Well, let's not just
13 stop at marginal costs then, Mr. Bowman.

14 What about using something like
15 replacement costs or inflation adjusted costs or other
16 costs that have been mentioned here, wouldn't that also
17 be a methodology this Board should consider?

18 MR. PATRICK BOWMAN: Well, it's not a
19 methodology we've ever run across and we've never seen
20 reference to in any type of literature. It's never been
21 done in Manitoba, to our knowledge.

22 Moving beyond those three (3) key
23 considerations we've set out, though, to the extent that
24 things like replacement costs or inflation adjusted costs
25 get talked about in regulation of Manitoba Hydro, they

1 seem to be -- arise inherently on a -- on a premise that
2 we don't -- that we dealt with earlier that we don't
3 necessarily agree with that somehow one would want to
4 reflect replacement costs because the current generation
5 is using up the resources such that they will not be
6 there for the next generation who has to bear the higher
7 remaining costs as if you were, you know, say, using oil.

8 Eventually the low cost oil is gone and
9 you have to go for the high cost oil and you may want to
10 consider while you're using the low cost oil the fact
11 that some day you're going to have to go for the high.

12 Hydro electric power does not get used up
13 in that fashion. It gets used but it will remain
14 available.

15 The other point we would make is that if
16 anything the premise for thinking about moving to
17 replacement costs or that is to make sure that somehow
18 we're not sticking future generations with higher costs
19 or -- or burden of a system.

20 And I think the evidence is clear that if
21 anything, we're providing future generations with a low
22 cost beneficial system the same way past generations did
23 to today.

24 MR. BOB PETERS: Mr. Bowman, Mr. McLaren,
25 do you consider that Manitoba Hydro has used full cost

1 accounting in presenting their revenue requirement costs
2 to be included in the cost of service study?

3

4

(BRIEF PAUSE)

5

6 MR. PATRICK BOWMAN: Mr. Peters, to the
7 extent that costs arise for Manitoba Hydro, consistent
8 with the concept of full cost accounting, such matters as
9 mitigation costs, paying for compensation relating to the
10 Northern facilities, they're all included in the revenue
11 requirement.

12 In that regard, Hydro is incorporating the
13 full costs that have arisen to date and that have arisen
14 in its books of the system that's been put in place. If
15 we're talking about something beyond that in terms of
16 notional costs that one would want to charge ratepayers
17 notional costs beyond what Hydro incurs, it's certainly
18 not something we've seen in other jurisdictions.

19 It's certainly not something that we would
20 recommend one wanting to include in consideration of a
21 revenue requirement. We would suggest, and some of this
22 moves into other areas of practice that we work in, we
23 would suggest that to the extent there are externalities,
24 impacts of operations, that the utility would incur costs
25 to mitigate those impacts and those would be valid costs

1 of the system. Internalizing the externalities which is
2 at the core of ensuring environmental costs are
3 appropriately priced in a cost of service study.

4 The other comment about full cost
5 accounting that has arisen is in terms of something like
6 CO2 emissions and it certainly seems a bit bizarre that
7 one would want to set rates such that the ratepayer is
8 paying a revenue requirement that includes the cost to
9 mitigate the impacts of the hydro they're using and also
10 add another adder that mitigates the costs of the CO2
11 that they're not using.

12 I'm not sure how you end up paying for the
13 mitigation of both sources of power when you're only
14 using one. It's a -- it's a strange concept.

15 MR. BOB PETERS: But I think, as Mr.
16 Lazar indicated, it's -- Manitoba Hydro would be
17 displacing fossil fuel in some other jurisdiction and,
18 therefore, on a global perspective they should -- they
19 should consider that an adder for CO2 would be the
20 responsible thing to do?

21 MR. PATRICK BOWMAN: Mr. Lazar seems to
22 come to that concept by drawing a line around the
23 province of Manitoba and suggesting that if the power
24 weren't used here it wouldn't be used anywhere.

25 If someone wanted to deal with global

1 concepts, in particular, with respect to industrials,
2 which is the one that we deal with, the point is the load
3 moves.

4 If Mr. Turner talked about his plant
5 expansion being to offset a plant decrease in Louisiana
6 where they use a different form of power, on a net basis
7 we're not talking about new load, we're talking about
8 securing that load for Manitoba.

9 Has it reduced Manitoba Hydro's exports?
10 Yes, but it's also reduced the production of power where
11 it was before, globally, which is the way Mr. Lazar's
12 inherent thinking appears to be designed to go.

13 We're not talking about drawing a line
14 around the Province and ignoring load changes outside the
15 Province.

16 MR. BOB PETERS: Did you review the
17 calculations made by Mr. Lazar and his calculation of,
18 say, CO2 adders?

19 MR. PATRICK BOWMAN: Could you refer me
20 to which calculation you mean?

21 MR. BOB PETERS: Well he came up with
22 numbers of ten dollars (\$10) a tonne and did his
23 calculations based on that. Did you have a chance to
24 review those?

25 MR. PATRICK BOWMAN: I read the evidence,

1 I didn't review them in terms of whether they were
2 reasonable. I have no experience with the costs of CO2
3 emissions, at the market cost today and ten (10) versus
4 forty dollars (\$40) a tonne.

5 MR. BOB PETERS: So you don't have any --
6 you didn't review the actual costing that you did, but in
7 principle you're saying to this Board that it doesn't
8 make sense to include an environmental adder based on
9 CO2, which would be from some other jurisdiction?

10 MR. PATRICK BOWMAN: Yes. And
11 particularly in light of environmental adder for the
12 power one didn't use after effectively already paying an
13 environmental adder for the power one did use, if I can
14 put it that way, in regards to Hydro's northern
15 generation.

16 MR. BOB PETERS: Has Manitoba Hydro
17 quantified all of its environmental externalities?

18 MR. PATRICK BOWMAN: I can't comment on
19 that, sir. There are certainly substantial costs in
20 Manitoba Hydro's books related to environmental
21 externalities and impacts on communities.

22 My understanding is there may be some
23 outstanding matters, but that would be a question more
24 appropriate for Manitoba Hydro.

25 MR. BOB PETERS: Fair enough. What are

1 your comments to the Board about the vintaging
2 methodology and the cost of service studies that are
3 before them?

4 MR. PATRICK BOWMAN: We don't have a lot
5 of comments. We didn't spend a lot of time reviewing it.
6 It hasn't been front and centre in this proceeding.

7 We did comment on vintaging before, or I
8 did, when I was here with Mr. Osler, that we didn't think
9 vintaging was a good idea, particularly in relation to
10 the cost of service study where one is trying to measure
11 the costs for the purposes of setting rates.

12 To the extent that one is thinking about
13 vintaging related to giving the new resources to export
14 so that you can determine the level of exports, I think
15 that's more the concept that may need to be considered in
16 determining the thresholds.

17 But, as we suggested, it's not a cost of
18 service consideration. It's the wrong tool for thinking
19 about that.

20 MR. BOB PETERS: Before I switch to
21 another area, I just want to go back. There was a
22 thought that you commented on the NERA report and the
23 utilities on which it surveyed.

24 But you can confirm to the Board that
25 there was no other utility that had the net export

1 profits to the extent of Manitoba Hydro, and therefore to
2 that extent Manitoba Hydro would be unique?

3

4

(BRIEF PAUSE)

5

6 MR. PATRICK BOWMAN: Mr. Peters, I've
7 pulled out the survey now, the data in the NERA report,
8 which is at page 21 of their generation -- or
9 classification and allocation methods for generation and
10 transmission.

11 In terms of the question you asked about
12 the -- about the level of exports. There is no
13 particular data in this response that indicates the
14 dollar value or the prices received for exports. So I'm
15 not relying necessarily on that data.

16 But, in terms of ratios, there are some
17 here that -- that export the way export is defined in
18 this off system sales, greater percentages of Manitoba
19 Hydro.

20 There are certainly some that secure
21 higher export revenue prices than Manitoba Hydro. An
22 example given earlier was Hydro Quebec which is looking
23 back at their annual report was an average twenty-five
24 (25) cents a kilowatt hour for what they exported last
25 year.

1 And there are certainly some that receive
2 larger dollar value exports than -- than Manitoba Hydro,
3 as I understand it.

4 There are none that have the confluence of
5 all of those along with regulation. That -- in that
6 aspect Manitoba Hydro is unique.

7 MR. BOB PETERS: I want to turn with you
8 to exports. And your evidence to the Board is that
9 Manitoba Hydro has not properly set up the export class.
10 Would that be -- would that be correct?

11

12 (BRIEF PAUSE)

13

14 MR. PATRICK BOWMAN: It's a bit of a
15 difficult question, Mr. Peters, because it depends on
16 what you're trying to do with the export class. It's --
17 it's a different animal in a cost of service study than
18 measuring the costs that you would use for basing rates
19 for other customers.

20 But as we would understand the intent of
21 the export class, it's intended to, at least to some
22 degree, track the traditional type of cost of service
23 considerations, even though it's not ultimately used to
24 set rates for that class.

25 In that regard, Hydro's basic premise for

1 their opportunity -- for the treatment of opportunity
2 sales in the cost of service study seems incorrect. It
3 seems premised the way that other utilities work with --
4 we work with would think about for excess by-products
5 otherwise wasted power type of sales, dump and get the
6 revenue you can.

7 It does not seem premised on the Utility
8 that plans, builds for, encourages capital costs and --
9 and operates its system to maximize.

10 MR. BOB PETERS: Do you agree that the
11 extent to which exports cause capital assets to be built
12 may be different from the extent to which they actually
13 use those assets for exports?

14 MR. PATRICK BOWMAN: Yes, absolutely.
15 You -- you build -- you make the decision to build a
16 plant on a with/without analysis looking at what your
17 change in your revenues would be and what your change in
18 your costs would be on the decision to proceed versus not
19 proceed.

20 Once it's ultimately in service though,
21 you operate it as a system and there's no tracking which
22 kilowatt hour goes where or for what purpose.

23 MR. BOB PETERS: Does your threshold
24 methodology before the Board, is that predicated on there
25 being no export class?

1 MR. PATRICK BOWMAN: No. It's not linked
2 in any way to the export class. It could be -- were this
3 Board to want to pursue it, it could be pursued with or
4 without an export class and it would need to be
5 determined separately from what we've seen put forward as
6 export classes and -- and, presumably, separate from the
7 type of considerations that one would use in developing a
8 cost of service study.

9 MR. BOB PETERS: When you look at the
10 opportunity exports from the Utility's perspective, do
11 you agree that whether they come -- the delineation
12 between opportunity and firm is appropriate based on --
13 on dependable energy?

14 MR. PATRICK BOWMAN: Can you clarify
15 delineation between opportunity and firm? For what
16 purpose?

17 MR. BOB PETERS: For the purpose of the
18 cost of service study and is it appropriate to -- to
19 divide the export class into two (2) categories as
20 Manitoba Hydro has done?

21 MR. PATRICK BOWMAN: No.

22 MR. BOB PETERS: And explain your answers
23 to the general question that I asked, please?

24 MR. PATRICK BOWMAN: The key
25 consideration in terms of thinking of the cost of service

1 study is how the system is designed, planned and
2 operated. And in particular in this regard we would say
3 designed and planned and built.

4 When one is looking at the decisions made
5 to incur capital costs and design and build the system,
6 opportunity are effectively no different than firm. They
7 don't get different weightings, they aren't ignored,
8 they're inherent to the decision to proceed.

9 The only difference between non dependable
10 energy and dependable energy is how -- is whether you can
11 rely on it showing up every year.

12 Firm will show up every year. Opportunity
13 will only show up nineteen (19) out of twenty (20) or
14 eighty-seven (87) out of eighty-eight (88) or whatever
15 the range of probabilities one's dealing with.

16 But you don't -- you don't look to that --
17 to any given year when you're making decisions to commit
18 to capital. You look to the long-term benefits that you
19 expect to receive. That's why when something like the
20 Wuskwatim project is designed the opportunity revenues
21 would be a component of the economic analysis. They'd be
22 a substantial part.

23 They're not ignored because they might not
24 show up some year. They're inherent because you know
25 they're going to show up most years if not almost all

1 years.

2 MR. BOB PETERS: What transmission costs
3 should be assigned to export if there was such a class?

4

5 (BRIEF PAUSE)

6

7 MR. PATRICK BOWMAN: On this -- on this
8 matter which was something we dealt with in -- in Section
9 3 of our evidence, we only reviewed the proposals that
10 were put forward in this hearing and in our view sub-
11 functionalizing parts of the transmission system to
12 export versus non-export was -- was -- was not
13 appropriate.

14 We haven't thought in detail about the
15 transmission lines you would put to export were you to
16 design an export class and would they be any different
17 than the transmission lines you'd put to domestic
18 customers. Intuitively though my suspicion is they're not
19 that different, if at all.

20 The transmission system is not one that is
21 easily targeted for this -- this load goes there or this
22 one flow -- this kilowatt hour flows that way. It's --
23 it's very much a system.

24 The exception would be if an asset was put
25 in place solely to serve a customer class which is a

1 typically rule in the Cost of Service Study. An asset
2 put in place solely to serve a customer class would be
3 directly assigned to that customer and we've heard that
4 same evidence out of Manitoba Hydro.

5 MR. BOB PETERS: All right. Fair enough.
6 In terms of the way Manitoba Hydro approach that's
7 recommended treats firm exports similar to domestic, do
8 you understand Manitoba Hydro to be treating opportunity
9 similar to curtailable domestic rates?

10

11 (BRIEF PAUSE)

12

13 MR. PATRICK BOWMAN: No, they're not
14 treated similarly. Curtailable customers are a separate
15 class that are assigned a full share of embedded costs.
16 They just have a different load characteristic to reflect
17 their -- their -- the opportunity to curtail them at
18 certain times; that's entirely different than the
19 opportunity sales which Manitoba Hydro proposes to -- to
20 treat with solely variable costs.

21 MR. BOB PETERS: Does that suggest then
22 that there should be higher costs assigned to opportunity
23 exports under the Manitoba Hydro methodology?

24 MR. PATRICK BOWMAN: I wouldn't cite that
25 as one of the compelling reasons for -- for arriving at

1 that result and the reason is because curtailable service
2 is -- is quite a bit different than opportunity sales.

3 Curtailable service -- the curtailable
4 service program is a firm domestic service assured supply
5 to a customer who simply opts for an additional add on
6 that they can be interrupted at certain times under quite
7 strict rules; that's not the same as opportunity sales.

8 MR. BOB PETERS: Gentlemen, what's the
9 position of Intergroup on the assignment and/or the
10 allocation of power purchases to firm and opportunity
11 export classes?

12

13 (BRIEF PAUSE)

14

15 MR. PATRICK BOWMAN: Mr. Peters, the
16 issue only arises under Hydro's proposal not NERA's
17 proposal and in that regard it's -- it's -- it's unique
18 to trying to capture this very short-term variable cost
19 rather than a full share of costs.

20 So we -- we would suggest it's a
21 complexity that need not be there if one was to adopt the
22 NERA approach to setting an export class. In terms of --
23 of Hydro's approach though, and the proposals that seem
24 to have been put forward in this Hearing, we would
25 suggest that both purchase power and fuel costs be

1 reflected in a way that's consistent with median water
2 conditions that the rest of the cost of service is based
3 on, so it retains its internal consistency.

4 On that one, there is some different
5 splitting to reflect voltage stability considerations and
6 use of plants for different factors. But, in general,
7 the shares -- the shares assigned to exports would
8 reflect primarily those services being to serve as
9 exports.

10 MR. BOB PETERS: And that's because under
11 median flow conditions, you don't need the power
12 purchases or the fuel cost to support domestic load?

13 MR. PATRICK BOWMAN: Yes, with the
14 exception of the voltage stability, I believe it related
15 to Brandon, that we heard about elsewhere in the Hearing.

16
17 (BRIEF PAUSE)

18
19 MR. BOB PETERS: I take it that the --
20 one (1) of the fundamental problems you have with the
21 Manitoba Hydro proposal on the export class, is that
22 they're allocating embedded costs to the export classes,
23 and you think that's fundamentally wrong from the start?

24 MR. PATRICK BOWMAN: I think I may have
25 heard the question backwards, so maybe I'll get you to

1 repeat it.

2 MR. BOB PETERS: Let me ask it this way:
3 What is your position on the allocation of embedded costs
4 to firm export and to opportunity export?

5 MR. PATRICK BOWMAN: Well, let me deal
6 with it in three (3) ways: First, allocation of embedded
7 costs to firm export and opportunity costs is an issue
8 that arises if one goes forward with an export class.
9 And as I noted, depending on what you want to use it for,
10 and we have some concerns over its limited use the --
11 you'd only go there if you were actually doing an export
12 class.

13 Second, to the extent that you were
14 creating export classes, the NERA approach, which assigns
15 a full share of embedded costs against both firm and
16 opportunity exports, seems more sensible to us, in terms
17 of providing some information about the average cost to
18 serve exports.

19 And third, when one is speaking about
20 excesses or thresholds, the average costs to serve
21 exports is not the right tool. So we would caution
22 against using it for that purpose.

23 MR. BOB PETERS: What is the right tool?

24 MR. PATRICK BOWMAN: Well, the right
25 tool, Mr. Peters, is subject to some debate, in a revenue

1 requirement context at a revenue requirement hearing.
2 But, as we noted it would -- you would want to focus on
3 probably a calculation that evolves over time to reflect
4 resources put in place and that's fundamentally based on
5 a unit cost framework.

6 MR. BOB PETERS: Do exports draw on
7 cheaper incremental power than average cost of
8 generation?

9 THE CHAIRPERSON: Mr. Peters, while Mr.
10 Bowman is consulting with his colleague, can you give us
11 an estimate of the remaining time you'll require?

12 MR. BOB PETERS: Five (5) to ten (10)
13 minutes maximum.

14 THE CHAIRPERSON: Okay.

15

16 (BRIEF PAUSE)

17

18 MR. PATRICK BOWMAN: Your question, Mr.
19 Peters, as I understand it, is: Do exports draw on
20 cheaper incremental power?

21 And my first comment is: In regards to
22 that language, no, because, as I noted, you can't track
23 where kilowatt hours come or go. So exports are drawing
24 off of the same transmission system as anyone else is
25 drawing off of.

1 The point for a cost of service context
2 is, are exports ultimately being served by and are the
3 decisions to serve exports or to chase exports or to do a
4 cost for exports, cheaper incremental decisions, or are
5 they higher cost than average decisions?

6 And our review of hydro's system and the
7 capital plans in the investment decision it's made and
8 that it's planning to make, is that they are higher than
9 average costs.

10 MR. BOB PETERS: All right. I want to
11 turn to something I think Mr. McLaren had mentioned
12 earlier. How would you recommend the Board determine the
13 portion of generation to be classified as demand?

14

15 (BRIEF PAUSE)

16

17 MR. ANDREW MCLAREN: I would believe I'd
18 summarize our primary point in the evidence we prepared
19 as being that we thought it was probably appropriate and
20 necessary to recognize capacity and coincident peaks as a
21 legitimate cost driver for generation resources and that,
22 therefore, there should be some explicit method of
23 recognizing that.

24 The system load factor approach has been
25 used in this jurisdiction. There wasn't a specific

1 proposal on the record for any other sort of
2 determination of a split of the portion of generation
3 costs that should be classified between energy and
4 demand, and we haven't taken an explicitly strong
5 position on -- on any new method either.

6 MR. BOB PETERS: Do I take from that
7 answer, Mr. McLaren, that you don't want to put forward a
8 level of demand classification that you think is
9 appropriate for Manitoba Hydro's generation system?

10 MR. ANDREW MCLAREN: We don't -- we don't
11 see any overwhelming evidence to want to change from the
12 -- the currently approved method of determining that
13 split between demand and energy.

14 MR. PATRICK BOWMAN: Mr. Peters, we did
15 answer an IR on this question. If I can find it quickly,
16 I'll provide you the reference, but it's not leaping out
17 at me.

18 MR. BOB PETERS: Gentlemen, turning to
19 demand charges, as well as the energy charges, what --
20 what proportion of total billing for each class do you
21 believe relates to demand charges? Maybe we should just
22 start with the general service large.

23 MR. PATRICK BOWMAN: Well, Mr. -- Mr.
24 Peters, you asked in terms of billing and in terms of the
25 general service large. I don't have the exact number in

1 front of me but it has -- we've had it cited that the
2 general service large class is currently paying rates
3 that were -- were one to turn them on to energy would
4 average three point one (3.1) cents.

5 The actual energy rate is a fair bit lower
6 than that. The remainder is effectively the demand
7 charge. But I -- I can calculate the ratio quickly.

8 THE CHAIRPERSON: If you want it, Mr.
9 Peters, perhaps you could take it as an undertaking.

10 MR. BOB PETERS: I would ask for that.
11 And if you want to provide it for other classes as well,
12 we'd -- we'd appreciate the numbers on the record and we
13 can talk to you specifically about that.

14 MR. PATRICK BOWMAN: We're -- we're a bit
15 concerned we may not have the data to actually do that.
16 We have the revenues by class but I'm not sure we have
17 the revenues as they derive from each of the billing
18 determinants from customer charges versus demand charges
19 versus energy charges.

20 MR. BOB PETERS: We understand your
21 concern, Mr. Bowman. If -- if it can be limited to the
22 order of magnitude we'd accept that but we can -- we can
23 be specific.

24

25 --- UNDERTAKING NO. 26: Turning to demand charges, as

1 well as the energy charges,
2 what proportion of total
3 billing for each class
4 relates to demand charges and
5 MIPUG to provide that ratio.
6

7 CONTINUED BY MR. BOB PETERS:

8 MR. BOB PETERS: Is it your view that
9 energy conservation would be better served by lower
10 demand and higher energy charges?

11 MR. PATRICK BOWMAN: The only extent to
12 which we've discussed and reviewed that in this hearing
13 is in regards to energy charges on a step type rate or at
14 the margin where higher energy rates would -- would
15 typically be linked to efficiency or conservation
16 objectives.

17 We -- we haven't looked at the demand
18 charges and -- and the art of rate design to any great
19 extent.

20 MR. BOB PETERS: So -- so your answer is
21 that, on behalf of MIPUG, you can't indicate whether
22 there would be support for a shift in the demand and
23 energy split?

24 MR. PATRICK BOWMAN: Most certainly we
25 cannot indicate that at this time.

1 MR. ANDREW MCLAREN: I would also point
2 out that the impact would vary depending on the load
3 factor of the particular customer in question as well.

4 THE CHAIRPERSON: If you have a lot more,
5 Mr. Peters, we're going to have to take a break.

6 MR. BOB PETERS: Mr. Chairman, if I can
7 just have thirty (30) seconds, I think I am complete. I
8 just want to touch a couple --

9 THE CHAIRPERSON: Very good.

10 MS. PATTI RAMAGE: Mr. Chairman, maybe
11 while Mr. Peters is checking his notes, we have
12 distributed Manitoba Hydro Undertaking 18, which it was
13 the insurance undertaking.

14 THE CHAIRPERSON: Thank you, Ms. Ramage.
15 We've just noticed that too. That's Exhibit 27.

16

17 --- EXHIBIT NO. MH-27: Undertaking 18

18

19 MS. PATTI RAMAGE: That's correct. And
20 perhaps, Mr. Wiens, you had asked for some details on the
21 numbers that I had been referencing in my cross-
22 examination on increases, and he has those numbers if
23 you'd like him to put them on the record right now.

24 THE CHAIRPERSON: Very good. Please, Mr.
25 Weins.

1 MR. ROBIN WIENS: Yes, Mr. Chairman, I
2 will only reference that this -- these numbers apply to
3 industry that uses energy -- electrical energy as a
4 feedstock. And in the fiscal year 2000/2001, that
5 industry utilized 564 Gigawatt hours of energy.

6 And in the fiscal year 2005/2006, it
7 utilized 1,661 Gigawatt hours of energy.

8 THE CHAIRPERSON: Thank you, Mr. Wiens.
9 Thank you, Ms. Ramage.

10 Mr. Peters...?

11 MR. BOB PETERS: I want to thank Messrs.
12 Bowman and McLaren for their answers to my questions.
13 I've completed them. Thank you.

14 THE CHAIRPERSON: Thank you, Mr. Peters.
15 Thank you, Ms. McCaffrey, Mr. Bowman and Mr. McLaren.

16 THE CHAIRPERSON: Oh, you've changed your
17 mind, Ms. Mccaffrey?

18 MS. TAMARA MCCAFFREY: I was actually
19 just speaking in terms of Mr. Williams' cross-
20 examination. There's only one (1) question I have and it
21 actually arises from your questions of Mr. Bowman --

22 THE CHAIRPERSON: Please.

23 MS. TAMARA MCCAFFREY: -- Mr. Chairman.

24 THE CHAIRPERSON: Please. I'll accept
25 responsibility.

1

2 RE-DIRECT-EXAMINATION BY MS. TAMARA MCCAFFREY:

3 MS. TAMARA MCCAFFREY: Mr. Bowman, you
4 recall the discussion with the Chairperson with respect
5 to rate increases being in excess of the projected rate
6 increases on the IFF; you recall that discussion?

7 MR. PATRICK BOWMAN: Generally. It's
8 been a long day.

9 MS. TAMARA MCCAFFREY: I believe that one
10 of the comments you indicated was to the extent there
11 would be too much revenue, it would be taken out of the
12 system, outside of the cost of service? I'm giving you
13 an opportunity to clarify whether you meant taking it out
14 of the system, meaning the cost of service system, or the
15 hydro system as a whole?

16 MR. PATRICK BOWMAN: I'm sorry if I was
17 unclear on that point. We're talking about the taking
18 out of the calculation of the revenue requirement so that
19 the revenue requirement is higher than it would otherwise
20 be, at least in the early years, not taking out of the
21 hydro system as a whole, which we dealt with elsewhere,
22 noting that that would not be a sensible move, given the
23 level of reserves and retained earnings and debt to
24 equity ratios one is dealing with today, subject to
25 looking at all the risks and quantification matters that

1 are noted elsewhere.

2 THE CHAIRPERSON: Thank you, Mr. Bowman.

3 MS. TAMARA MCCAFFREY: That's all I have.

4 THE CHAIRPERSON: Thank you, Ms.

5 McCaffrey. In particular, I want to thank Mr. Bowman,
6 notwithstanding that this Board may differ with him on
7 certain matters, may, as we may with the other witnesses,
8 we found Mr. Bowman's responses to be direct, crisp,
9 disciplined, detailed, consistent, courteous. And as
10 were the contributions of Mr. Harper and Mr. Lazar and
11 the members of the Manitoba Hydro's panel suggestive of a
12 considerable knowledge base.

13 So thank you, sir.

14 MR. PATRICK BOWMAN: Thank you.

15

16 (WITNESSES STAND DOWN)

17

18 THE CHAIRPERSON: Now, this evidentiary
19 phase of the COSS hearing will conclude with these
20 comments:

21 The evidence received and heard to date
22 represents an impressive array of occasionally divergent
23 concepts and views. The witnesses that appeared made
24 contributions to the Board's understanding of the issues
25 involved and the significance attached to the concepts

1 discussed.

2 All parties involved appear to understand
3 the opportunities, risks and responsibilities that lie
4 with the decision and directions that flow out of this
5 process. Though acknowledging that the COSS is but one
6 (1) component or tool available for use in the rate
7 setting process, all parties appear to acknowledge and
8 expect that the COSS will remain a significant exercise
9 of considerable import.

10 The objectives and principles undergirding
11 rate setting and, for some, the COSS, have been raised
12 and discussed by the witnesses, as forming what some
13 would expect to be the criteria by which an appropriate
14 COSS would be evaluated.

15 Why, as well as how, are both important
16 questions before us. We have heard and occasionally
17 discussed in some depth, not only the four (4) models put
18 forward by Manitoba Hydro, including the Utility's
19 preferred model, but several additional versions or
20 further amendments suggested by various parties.

21 We look forward to the contributions to
22 come in the closing statements of the Intervenor and
23 Manitoba Hydro. While comments on the purpose and design
24 of the future COSS are expected, comments on related
25 matters are welcome.

1 In Mr. Peters and my opening remarks to
2 this Hearing, quite a list of issues potentially to be
3 considered at this Hearing was provided.

4 Intervenors and Manitoba Hydro may wish to
5 review the transcript in this respect as one (1) further
6 test of the scope of intended closing comments.

7 On Monday, we will hear from the
8 Intervenors and then due to circumstances we will adjourn
9 until Friday, June the 2nd, at which time we will hear
10 from Manitoba Hydro.

11 After that the Board will sequester itself
12 and carefully review and consider the issues in evidence
13 and prepare an Order.

14 Given the particular importance of this
15 upcoming Order, you may be assured that the Board will
16 take such time as it requires to draft and become fully
17 comfortable with its decisions and directions that will
18 be contained in the Order.

19 While we share Mr. Harper's view that the
20 COSS is a living document and will be subject to change
21 and finetuning as further rate applications come forward,
22 we also understand that this a time to establish, at a
23 minimum, the parameters for further COSS.

24 All Intervenors, for the consumers and the
25 parties they represent, as well as Manitoba Hydro and

1 this Board, consider the COSS to have import regardless
2 of the fact that it is but one (1) component or tool in
3 ratesetting.

4 We stand adjourned and look forward to
5 Monday and closing comments of the Intervenors.

6 Thank you.

7

8 --- Upon adjourning at 6:18 P.M.

9

10

11

12

13 Certified Correct,

14

15

16

17

18 _____
Ryan Pickering

19

20

21

22

23

24

25