



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO
2017/18 and 2018/19
GENERAL RATE APPLICATION
PUBLIC HEARING

Before Board Panel:

Robert Gabor	- Board Chairperson
Marilyn Kapitany	- Vice-Chairperson
Larry Ring, QC	- Board Member
Shawn McCutcheon	- Board Member
Sharon McKay	- Board Member
Hugh Grant	- Board Member

HELD AT:

Public Utilities Board
400, 330 Portage Avenue
Winnipeg, Manitoba
January 9th, 2018
Pages 3597 to 3853

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1 --- Upon commencing at 9:03 a.m.

2

3 THE CHAIRPERSON: Good morning
4 everyone. I hope everyone had a good weekend. Ms.
5 Steinfeld...?

6 MS. DAYNA STEINFELD: Thank you, Mr.
7 Chair. Today we have scheduled the witness for the
8 Green Action Centre, Mr. Paul Chernick. He's
9 scheduled to be an hour in direct examination,
10 followed by cross-examination by the Assembly of
11 Manitoba Chiefs, Consumers Coalition, GSS/GSM/KAP,
12 MIPUG, Manitoba Hydro and concluding with Board
13 counsel at the end of the day.

14 We will continue after today for the
15 rest of this week with evidence from independent
16 expert consultants, Daymark ex -- exports, Daymark
17 load and Dr. Yatchew on Friday. Thank you.

18 THE CHAIRPERSON: Thank you. Mr.
19 Gange...?

20 MR. WILLIAM GANGE: Thank you, Mr.
21 Chair, members of the panel. It's my honour to be
22 here today to present the evidence of Green Action
23 Centre. With me is Mr. Paul Chernick. Mr. Chernick's
24 direct testimony has been filed as GAC-11 and as part
25 of GAC-11, Mr. Chernick's extensive CV is set out.

1 Mr. Chernick has testified before this Board on behalf
2 of Green Action Centre on numerous occasions over the
3 past ten (10) years and I -- as per instructions from
4 you, Mr. Chair, I am not going to go through Mr.
5 Chernick's qualifications, and we'll just proceed into
6 the evidence.

7 It's -- for the most part Mr. Chernick
8 is going to be on a pretty long leash from me and I'm
9 going to have very minimal involvement. Certainly, we
10 -- we invite the panel, as always, to interrupt if
11 this gets confusing. Some of the evidence is quite
12 technical in nature. Mr. Chernick has prepared an
13 outline of his evidence, which I would ask Mr.
14 Simonsen to file as Green Action Centre Number 17.

15 MR. KURT SIMONSEN: Thank you very
16 much.

17

18 --- EXHIBIT NO. GAC-17: Outline of Mr. Chernick's
19 evidence.

20

21 THE CHAIRPERSON: Mr. Chernick,
22 welcome. I would just indicate to you that I and a
23 few others are newbies on the panel and this is
24 technical, quite technical, as I read your paper and I
25 note that. At the outset of the hearing in my opening

1 comments, I asked if counsel and witnesses could be
2 clear and concise and I would ask the same of you. I
3 understand this is very technical information, but if
4 -- and -- and I think the panel will have no
5 hesitation asking questions if we --

6 MR. PAUL CHERNICK: Unfortunately,
7 clarity and concision can be -- can be conflicting
8 goals in this and I -- I warned Mr. Gange that if I --
9 if he just told me, make sure everything is fully
10 explained, we'd be here all day just with -- with my
11 opening statement and you'd be ready to take the exam
12 at the end of the course, but that's just my natural
13 tendency.

14 THE CHAIRPERSON: I'm sure we'd want
15 to take the exam, Mr. Chernick. I appreciate your
16 comment.

17 MR. PAUL CHERNICK: Perhaps I over
18 rate my -- my abilities as a Professor. Okay. Okay.
19

20 GAC PANEL:

21 PAUL CHERNICK, Sworn

22

23 EXAMINATION-IN-CHIEF BY MR. WILLIAM GANGE:

24 MR. WILLIAM GANGE: Mr. Chernick, in
25 this hearing we've -- Green Action Centre has asked

1 you to comment on a number of items, including
2 residential rate design which is broken down into
3 affordable rates and conservation rates. We've asked
4 you to comment upon problems that you see with
5 marginal costs and rate design; and you've also
6 provided testimony with respect to demand charges.

7 Is that correct?

8 MR. PAUL CHERNICK: Yes.

9 MR. WILLIAM GANGE: If we could start
10 with the affordable rates, which is on page 3 of
11 Exhibit Number 17.

12 MR. PAUL CHERNICK: Yes, this -- this
13 issue of affordable residential rates has been a long-
14 standing topic of discussion and -- and interest by
15 the Board, which I think was -- has already been
16 discussed in this hearing so I won't go into any
17 detail.

18 At the Hydro workshop in July, I
19 presented a proposal for designing low income rates
20 and space heating rates to provide discounts for those
21 groups to mitigate the effects of rising electric
22 prices. And I also explained how to minimize revenue
23 risk to -- to Hydro. I thought we got a lot of
24 interest from -- on -- about those possibilities from
25 the parties, and I suggested that Hydro, which

1 obviously has a lot more data than I do, refine my
2 design using more current data than I had and more
3 detailed data.

4 In this filing, Hydro has not proposed
5 any new affordability rates and has -- did not take me
6 up on my suggestion that they look into my -- my
7 designs and see how they would tweak them to -- to
8 work better and really only propose more study. So
9 that's where we are.

10 And I filed proposals, next page,
11 addressing the low income and electric space heating
12 groups and the -- the rationale for having a -- a rate
13 for low income customers is that many of those
14 customers are experiencing great financial stress,
15 partly due to their electric bills but for other
16 reasons as well. That's an important social issue.

17 And, in principle, that issue could be
18 dealt with in a lot of different ways and -- by
19 government and a number of agencies, but the Board's
20 tools for addressing it are -- are somewhat more
21 limited but rate sign is one (1) way that the -- that
22 the Board can help with this problem.

23 And it's very common in other
24 jurisdictions to have lower rates for low income
25 customers. They are a variety of designs for that but

1 it's -- it's a standard feature in many jurisdictions.
2 And so my approach was to eliminate the monthly
3 customer charge, which shouldn't have any effect on
4 the incentive of customers to conserve or consume
5 electricity, but would help them in terms of their
6 cash flow and reducing the rate for the first 500
7 kilowatt hours, which appears to have only a minor
8 effect on the incentive to conserve.

9 And since the majority of energy is in
10 bills that are over 500 kilowatt hours, customers
11 would be saving the full retail rate, regular
12 residential rate for any conservation they did and
13 would be paying that rate for any additional
14 consumption and, therefore, the incentive to conserve
15 remains almost unchanged for that group of customers
16 as a whole.

17 And I -- I'd just like to point out
18 that the first choice for any of these vulnerable
19 groups would be to reduce their usage with DSM, but
20 some of them are still going to have considerable
21 burdens and -- and rate design can help with that.

22 For the electric space heating the
23 basic rationale is that heating with electricity,
24 especially resistance electric heat, is more expensive
25 than heating with gas, which is the other major

1 heating fuel in the province and as rates rise, the
2 burden on those heating customers grow. Many of the
3 heating customers, especially in rural areas in the
4 North, don't have a good alternative to using
5 electricity and the Board's concern for heating
6 customers has at times conflicted with its interest in
7 rate design to promote conservation.

8 Now many jurisdictions have lower rates
9 for space heating customers, in part, to protect
10 customers who don't have alternatives and customers
11 who adopted electric heating in good faith in the past
12 when that seemed to be a good idea, when it was being
13 encouraged and now are stuck with systems that aren't
14 easy to retrofit.

15 Although again reducing their use,
16 switching to gas where that's available, probably
17 still make sense before -- in addition to any rates
18 design.

19 And again, reducing the rate for the
20 first small number of kilowatt hours compared to the
21 heating load would also have a minor effect on
22 conservation for this group of customers while
23 reducing their financial burden.

24 I also looked -- next, yeah -- at
25 conservation rates for residential, that would mean

1 rates that would encourage participation in Power
2 Smart and care in energy use by increasing the -- the
3 savings from conserving and discourage useful --
4 wasteful usage of electricity by making increased
5 usage more expensive.

6 And the objective there is to increase
7 the marginal rate for the bills that contain most of
8 the kilowatt hours.

9 For nonresidential the major issue is
10 shifting revenue from the demand charges which do not
11 do much to encourage conservation of -- of resources
12 or to do much of anything else that's very useful,
13 switching those revenues into energy charges.

14 And the -- the rate designs that I came
15 up with are laid out in the table that you're looking
16 at now. The approach that I took was to reduce the
17 first 500 kilowatt hours for -- the rate for the first
18 500 kilowatt hours for the low income customers in all
19 months and for various numbers of kilowatt hours for
20 usage in the various seasons for the non-low income
21 customers and then for low income heating customers,
22 to combine those and that's the fourth column you see
23 there.

24 And the -- the last column is a
25 somewhat different approach for the remainder of the

1 residential class to simply put the rate increase into
2 the second block above 500 which gives a -- about a
3 \$.01 cent differential in price between the first
4 block and the second block.

5 Now, that last column, the residential
6 conservation rate, that's just a redistribution of the
7 cost recovery within that group for the low income and
8 heating rates since we want to reduce the total burden
9 on low income customers and on heating customers,
10 somebody's going to have to pick up the difference and
11 at the bottom of this table, I calculate that if the -
12 - for -- for the low income if the non-low income
13 customers -- non-low income residential customer
14 specifically pay the difference, they'd be paying
15 about \$.01 cent more. If you look at this as a social
16 issue being dealt with on a community basis rather
17 than just within the residential class and spread the
18 -- the cost to all of the kilowatt hours, it would
19 only be about a quarter of a cent per kilowatt hour
20 for all the non-low income energy use.

21 MR. WILLIAM GANGE: Mr. Chernick, I
22 just want to emphasize that point. So those -- the
23 recovery rate from non-LICO residential that -- that
24 .00966?

25 MR. PAUL CHERNICK: Yes.

1 MR. WILLIAM GANGE: That's if -- if
2 the recovery is confined to the residential class,
3 correct?

4 MR. PAUL CHERNICK: Exactly and then
5 the next -- all non-LICO and non-SEP the .00246, that
6 is if the recovery includes the -- the --

7 MR. PAUL CHERNICK: Non residential.

8 MR. WILLIAM GANGE: -- the commercial
9 classes?

10 MR. PAUL CHERNICK: That's correct.

11 MR. WILLIAM GANGE: Okay. Thank you.

12 MR. PAUL CHERNICK: Oh, thank you. I
13 did a similar calculation for the space heating and,
14 again, if you keep the -- the -- the revenue recovery
15 within the residential class will be about .04 cents a
16 kilowatt hour that the other residential customers
17 would pay. If you spread it out over all of the
18 classes it would be about .01 cent.

19 Now, these calculations were based on
20 Hydro's proposed rates. The Board asked me in
21 discovery to do some calculations looking at similar
22 calculations for the interim rates that had been
23 approved which are on the next page, the table is laid
24 out exactly the same way. The effects are -- are very
25 similar in terms of recovery rate and the -- the

1 process of developing these rates is paralleled and
2 quite straightforward.

3 And -- and I'm not suggesting that I
4 found here the best possible design for either the low
5 income discount or for a space heating discount, but
6 these would be improvements over the status quo what
7 we got now. And there's no need to -- to phase in to
8 these rates or -- the negative impacts are really
9 quite small. The -- the Board can adjust the -- the
10 details in a -- in subsequent rate cases which I'm --
11 I understand you'll be facing on a regular basis for
12 several years.

13 And I strongly recommend that the Board
14 order Hydro to implement these rates or some variant
15 if you don't want to do it for 500 kilowatt hours do
16 it for 400 kilowatt hours if you don't want to force
17 in discount for the residential and -- and low income
18 and space heating, you could make it \$.03 cents but
19 some variant on -- on what I've proposed.

20 And then if Hydro has specific concerns
21 with the calculation, has found some -- some issues
22 with it, then it can now obviously file a motion to
23 vary, along with its analysis of what that problem
24 would be. Hydro really hasn't picked up the ball on
25 this yet. I think if the Board gives it specific

1 direction in terms rate design then you'd get some
2 specific response. Okay.

3 THE VICE-CHAIRPERSON: Mr. Chernick,
4 before you go, on page 6, the last column there, the
5 non-LICO IBNR.

6 MR. PAUL CHERNICK: M-hm.

7 THE VICE-CHAIRPERSON: What does IBNR
8 stand for?

9 MR. PAUL CHERNICK: The inclining
10 block rate, I'm sorry.

11 THE VICE-CHAIRPERSON: Okay, so your
12 basic charge at \$7.82, I notice that's different from
13 the --

14 MR. PAUL CHERNICK: Right, that's the
15 -- that's the current charge.

16 THE VICE-CHAIRPERSON: Okay.

17 MR. PAUL CHERNICK: And that would --
18 and so what I -- I did something very simple there. I
19 just said, let's not increase the current charge or
20 decrease it, the basic charge. Let's not change the
21 first block. Let's put all the increase into the
22 second block. So, that's how I came up with that
23 structure.

24 THE VICE-CHAIRPERSON: Thank you.

25 MR. PAUL CHERNICK: Now, when you look

1 back and -- and you look at the space heating rate,
2 which I've -- I've used in the second gra -- table,
3 I've used... Okay, page 7.

4 There's -- it's \$8.08 for the basic
5 charge for the space heating for non-low income and if
6 the Board decides to go with all of these concepts, it
7 could tell Hydro, we like the idea of the -- keeping
8 the customer charge the same for everybody. Keep it
9 at seven eighty-two and then have the \$.04 cent
10 discount for low income and space heating, and the --
11 and keep the -- the first block at the current rate
12 for other cust -- residential customers and then go
13 off and do your -- your rate calculations and tell us
14 what happens with the second block and with the
15 recovery rate.

16 It -- does that clarify things? And my
17 apologies for having left some -- some jargon in here
18 that if I had had more time to review it, I would've
19 cleaned up.

20 Okay. The sixth slide connects to the
21 issues that I deal with: One is the rate design; the
22 other is marginal costs. And what's the significance
23 of marginal costs for rate design? Well, the
24 significance or the primary significance is that the
25 tail block energy price, the pricing you're charged

1 for more usage or what you save by using less, that's
2 the conservation signal. And if that price is less
3 than marginal cost, customers aren't being charged
4 full cost of using more power, and they're not getting
5 the full -- they're not being given a signal equal to
6 the full savings from reduction in their usage.

7 And energy rates should generally be
8 brought up as close to marginal costs as feasible for
9 as much usage as is feasible, given revenue
10 constraints and continuity and gradualism and all that
11 kind of thing. And that has the effect of improving
12 the payback for efficiency investments, whether it's
13 Power Smart that's coming to a customer and saying,
14 you know, we'll invest this much if you invest that
15 much and you'll save this much per -- per year. Well,
16 if -- if that tail block rate is higher, the customer
17 is going to be saving more each year. Their payback
18 will look better. And instead of being five (5) years
19 it will be four (4) years -- whatever the numbers are
20 -- and the customer is more likely to participate with
21 a lower incentive from Power Smart.

22 The same is true if -- if a commercial
23 vendor approaches a customer and with a -- a payback
24 proposition. The higher that incremental energy rate
25 is, the better the -- the investment will look.

1 And also less quantitatively, there is
2 a -- a signal in that rate design that says that
3 public policy encourages conservation. If you use
4 more, you'll pay more. It's a fairly simple message,
5 but that's something that people probably respond to
6 and in terms of feeling virtuous, they're taking care
7 of themselves by the -- they're saving more by
8 engaging in these activities, and they're doing
9 something that the province, acting through the Board,
10 has set as a direction.

11 Now, unfortunately, Hydro's estimates
12 of marginal cost are understated in a number of areas
13 in terms of transmission and distribution costs, in
14 terms of generation costs and Hydro's comparison of
15 marginal cost to -- to rates omits environmental costs
16 completely.

17 Next slide, I -- I get in to more
18 detail about how Hydro underestimates the marginal T
19 and D costs and there are a lot of ways that -- that
20 it does this. It understates parts of the cost that
21 are load related. For the distribution cost per
22 kilowatt, Hydro uses a -- a load growth that's too
23 high so the -- the cost per kilowatt is lower because
24 they're -- what they do is they -- they look at
25 investments over a period time to divide it by load

1 growth over that period of time. And they use the
2 long -- wrong load growth number which we'll get to in
3 a moment.

4 Hydro ignores the cost of operating and
5 maintaining the new distribution and transmission
6 facilities. Their comparisons numbers use a hundred
7 percent load factor, that is, they assume that
8 customer loads are all the same in every hour of the
9 year. That they have a completely flat load. That
10 the average load equals the peak load and that's just
11 not true. You need more transmission distribution and
12 generation capacity per megawatt hour, per kilowatt
13 hour than -- than Hydro would indicate.

14 And my estimate of what a -- realistic
15 values for T and D would be at the residential --
16 transmission and distribution costs at the residential
17 level would be about twice Hydro's estimate for
18 transmission and, roughly, triple Hydro's estimate for
19 the distribution component. But those are basically
20 points that were covered in -- in my -- my prefiled
21 evidence.

22 In its rebuttal, Hydro does a few
23 different things. First of all, its critique of -- of
24 my evidence often misses the point completely of what
25 I'm saying and talks about something else completely.

1 Secondly, it defends its use of
2 underestimates, of mismatching load growth and
3 investment.

4 A third, it defends the overstatement
5 of the distribution load growth, and hence the
6 understatement of the cost per kilowatt.

7 And it defends ignoring O&M even though
8 they -- the rebuttal seems to indicate that would be a
9 significant factor.

10 Okay, in terms of missing the point,
11 Hydro suggested they -- that I didn't understand the
12 basic formula that they used for taking the present
13 value of the investments and dividing by the load
14 growth in this -- in the same period.

15 In fact, in my evidence I understood
16 that formula. I used it and all of my critiques have
17 to do with Hydro's inputs into that formula, not the
18 formula itself. So where they say, Mr. Chernick says
19 this is complicated, but it's not. It's a very simple
20 formula; that's true. The last step is a very simple
21 formula. But there's lots of detail behind it.

22 The -- the second place where they --
23 they really seem to miss the -- the point was that in
24 my critique of their using this hundred percent load
25 factor, flat load assumption, they -- they say that

1 you need to build more transmission to meet a real
2 load shape than you would if you had a flat load.
3 Well, that's exactly what I said in my evidence, so
4 it's not clear why they think that's a rebuttal to
5 what I said. And, in fact, they were describing the
6 mistake they made in which I corrected.

7 And Hydro also says, Well for DSM
8 screening, we don't make this mistake. We cor -- we
9 correct for the load factor when we're applying this
10 to a -- a DSM program. And that's good, but the same
11 logic applies for rate design. If you've got a 50
12 percent load factor for residential, if it --
13 contribution to peak loads is twice the average, then
14 you have to reflect the fact that you need twice as
15 much transmission and distribution capacity as you
16 would if you had a completely flat load.

17 Okay. On the -- the next point, and
18 perhaps I should have said this earlier in terms of
19 setting up how the marginal T and D study is -- is
20 done. These analyses, which I've done many of and
21 critiqued many of over the last couple decades, they
22 all take the same basic approach. You look at load
23 growth over some representative period, and it can be
24 the past, it can be the future, it can be a
25 combination of the two (2), whatever you have decent

1 data for and seems fairly representative of the period
2 for which you're doing the estimates. And you compare
3 that to the amount of investment need -- needed to
4 meet the load growth in that time period.

5 That's simple in concept. It gets much
6 more difficult when you actually get into the question
7 of which of these dollars that you're spending is
8 specifically to meet load growth as opposed to some
9 other reason, and to figure out how you line up the
10 periods, and -- and what years you have decent data
11 for.

12 Now, Hydro uses entirely forecasted
13 analysis, and in their forecast they include all the
14 load growth from the current year. In that case, that
15 was 2015, basically, was when -- when they were doing
16 the analysis, through 2025. So they've got ten (10)
17 years of load growth. And they're including the load
18 growth from 2015/'16, 2016/'17 and so on.

19 But they don't include all of the costs
20 of meeting the 2016 load growth, because they say,
21 Well, after all, some of that's already been spent,
22 and we can't save those particular dollars anymore.
23 So the -- the only costs that they include for meeting
24 the load growth in 2016 are the parts of the projects
25 that aren't done as of 2015. And generally, for --

1 for larger projects, you're going to have most of your
2 money spent before the -- the year that you need the -
3 - the capacity.

4 If we were looking at the question of
5 can you avoid this particular transmission line, can
6 you avoid this particular substation, Hydro's point
7 would be good one. You can't avoid that. But that's
8 not the purpose of these studies. We're taking a
9 small per -- period of time and estimating an average,
10 or typical, or representative ratio between load and
11 investment. And if you include the load growth in
12 some period -- for some period, like from six -- 2015
13 to '16, then you also have to include all the cost of
14 meeting that.

15 And Hydro also really has detailed cost
16 projections for its transmission distribution system
17 for only a few years, perhaps five (5) years, and this
18 is not unusual. Most of these projects don't take
19 that long to build. You don't have to be making any
20 serious commitment today to what you're going to do in
21 2027, or even 2025. You have a fairly detailed
22 analysis for the next three (3) years, and then a
23 little less so for the -- the following couple of
24 years, and then it starts to get, for the most part,
25 pretty sparse.

1 And Hydro recognizes this problem for
2 transmission and says, Well, we don't have much out in
3 the last couple years in our plans. We haven't
4 planned that far, so we're going to take an average of
5 the earlier years, investments, and stick that in
6 those later years as a placeholder, which is following
7 the concept of, we're looking for representative
8 numbers. We're not looking for avoiding -- at whether
9 we can avoid this particular project or that
10 particular project.

11 Now, they include in that some years
12 where they have very little planned, but -- and so
13 it's only a partial correction, but it's something,
14 anyway. And Hydro doesn't do anything of the sort for
15 its distribution cost.

16 And then I -- I -- to make this perhaps
17 a little bit more comprehensible for people who like
18 to see a bunch of -- of numbers, and I don't know
19 which of you that applies to, I created some tables.
20 The first one, and this is an extremely simple
21 presentation. It assumes that spending for the
22 projects needed for load growth in each year, that is,
23 each of the columns, that what's needed for 2016 is
24 column -- it says 2016. And that's spread out over
25 five (5) years, and all of them have the same pattern.

1 Just to be simple, I didn't -- didn't want to
2 introduce any additional confusion, here.

3 And in this case, I've assumed that it
4 takes \$260 million a year to meet the load growth that
5 your projecting. And then you've -- so each of the
6 columns is what you're spending for that year. In
7 each of the rows is the money that you're spending in
8 that year. So in, for example, 2013, you spend \$40
9 million for 2016 projects, and another \$20 million for
10 projects that will come in 2017.

11 And if that layout is fairly clear,
12 then we're ready to go on to the next case, in which I
13 -- next slide, which I illustrate what Hydro does with
14 these numbers. First of all, in the top left-hand
15 corner, we have values that I've -- I've represented
16 in grey, and those are the sunk costs as of the 2015
17 analysis. It includes only 2016 costs and beyond. So
18 they've explicitly taken those costs out and said, We
19 got the load growth in 2016, but we don't need to
20 spend money for that because we already have, and
21 we're going to assume that that right -- that's
22 typical and put that into our average.

23 And then for the later years, they have
24 incomplete information, because it's really too soon
25 to figure out which substations are going to be --

1 need to be reinforced, or -- or where you're going to
2 need more supply, because the projects haven't been
3 announced, the building permits haven't been issued,
4 developers are -- are having an -- maybe they've been
5 -- announced that they're planning on doing something,
6 but you have no idea when that building's going to get
7 built.

8 So the -- the plans out there are
9 pretty vague, and in this case, I've assumed, as I
10 show at the top, that for 2021 and 2022, 25 percent of
11 the costs are known, and that drops to 15 percent for
12 the last three (3) years. And I've -- I've shown
13 those numbers in -- in red.

14 And you wind up with, if you look
15 across the bottom row, instead of including \$260
16 million for every year, we have that for 2020, but for
17 most of the years, you're including much less in the
18 way of costs, but you're including all of the load
19 growth that is forecasted for that period. And in
20 this case, you would have only about 44 percent of the
21 costs for all the load growth, and therefore, your
22 conclusion about the cost of meeting a kilowatt of
23 additional load would be low by more than 50 percent.

24 In the next slide, I just show how the
25 -- the Company dealt with transmission. And if you

1 look at -- so the -- the -- up to the column that says
2 "distribution sum," it's exactly the same as the
3 previous page. And I added this column for the
4 transmission sum where, rather than using the very
5 partial data for spending in 2023, '24, and '25, the
6 last three (3) rows of data, Hydro looked at first
7 seven (7) years, averaged those, and stuck those in at
8 the -- what it -- what I've represented here as the
9 one fifty-five (155) per year. And that brings the --
10 the amount that's included up to about 50 percent of
11 the total for the example. But again underestimating,
12 both because of the incomplete data in the
13 intermediate years, and the exclusion of previous
14 costs. Okay.

15

16 CONTINUED BY MR. WILLIAM GANGE:

17 MR. WILLIAM GANGE: And Mr. Chernick,
18 when you --

19 MR. PAUL CHERNICK: Yes.

20 MR. WILLIAM GANGE: -- the -- the
21 column transmission sum --

22 MR. PAUL CHERNICK: M-hm.

23 MR. WILLIAM GANGE: -- where did you
24 get those numbers from?

25 MR. PAUL CHERNICK: Well, those are

1 the same as the distribution sum for expenditures
2 through 2022, and Hydro does its analysis based, not
3 on the cost of the projects scheduled to come in in
4 2016 or 2017, 2018, but on spending levels projected
5 for 2016/2017 and so on. Excuse me, I knew I had not
6 turned off everything.

7 The -- so for the first seven (7)
8 years. That's exactly the same as for the -- the
9 distribution sum. Then to show you the sort of -- of
10 adjustment that Hydro made for in the transmission of
11 marginal cost, I took the first seven (7) years,
12 averaged those numbers, got one fifty-five (155), and
13 then stuck that into the following three (3) years,
14 and that's essentially what they did for transmission,
15 and that's a -- an improvement over using their raw
16 data.

17 Although you can see that the spending
18 drops off over the years, it's pretty high in the
19 first years, and then it drops off as you get further
20 out, and you've got less and less of your -- your
21 spending plan.

22 MR. WILLIAM GANGE: Mr. Chair, I don't
23 know if there's anybody from the panel that wants to -
24 - any clarification from Mr. Chernick on -- on those
25 two (2) charts, but if -- if there's anyone that wants

1 to ask him questions on those chart -- two (2) charts,
2 I'd invite those.

3

4 (BRIEF PAUSE)

5

6 MR. PAUL CHERNICK: Okay. Okay. And
7 moving on to a -- another problem that Hydro addresses
8 in -- in rebuttal, the -- overstating the distribution
9 load growth, the distribution equipment is planned for
10 the loads that it serves, that if you got a -- a town,
11 and its load is growing, and the substation that
12 serves it is -- it doesn't have enough capacity, then
13 you add a transformer, or you add a new substation,
14 but it's only for the loads in that town that use the
15 substation. You may also have a -- a load -- and
16 served directly off of a subtransmission line or a
17 transmission line. And that load doesn't contribute
18 to the need.

19 So when you calculate the amount of
20 distribution cost that you're expecting, you should be
21 dividing it by the distribution load growth that
22 you're expecting. Unfortunately, Hydro divides the
23 distribution costs that they're expecting by the total
24 growth in load, which includes growth by the
25 transmission and subtransmission customers who don't

1 use the substations and don't use the distribution
2 feeders.

3 And -- and really, Hydro has, as most
4 utilities do, has -- has four (4) groups of customers
5 by voltage. There are secondary customers like the
6 residential and -- and the GSS class, where you have -
7 - the -- the Utility has to provide everything,
8 including a line transformer, and sometime secondary
9 wiring to connect up the customers to the system.

10 And then there are customers served at
11 primary voltage, which would be the GSL less than 30
12 kV class. They're served off the lines that run down
13 the street, basically, but they have their own
14 transformers, and so you don't have those costs.

15 And then there are the subtransmission
16 customers who were served at mostly 66 kV, and they
17 don't need the primary lines. They just need the
18 transmission and the subtransmission.

19 And then you have some transmission
20 customers served at over a hundred kV who are served
21 right off the high voltage transmission. And in
22 figuring out what the incremental -- what the cost is
23 of serving those customers and what the cost per
24 kilowatt is for each of those services, you have to
25 divide your expended expenditures your expendi --

1 expendit -- your expenditures on that kind of
2 equipment by the load growth of -- of the customers
3 who use it.

4 Now, the rebuttal takes this position
5 that the GSL 30 to 100 kV customers are distribution
6 load. That -- that means that they're -- they're
7 taking power off of either the 33 kV lines, of which
8 there aren't that many, or the more common 66 kV
9 lines. Now, even if -- if it were con -- true that
10 the GSL 30 to a hundred kV customers were distribution
11 load, that wouldn't explain -- it wouldn't excuse
12 including the real transmission customer -- high
13 voltage transmission customer's load growth in the
14 denominator for that distribution calculation. The --
15 take your -- your investment divided by your load
16 growth. But you'd still have to take the load growth
17 due to the -- the transmission customers out of there.

18 But in any case, it's not the case.
19 It's just not true that the distribution costs, the
20 feeders, the distribution substations that step down
21 to voltages in the 20 kV range, or -- or down to -- to
22 4 kV, or 8 kV, that -- that those are -- that -- that
23 the -- the GSL 30 to -- to a hundred kV customers
24 belong in that category.

25 But the cost of service study does not

1 allocate any distribution costs to the GSL 30 to
2 hundred kV class. The marginal cost estimates that
3 Hydro produces do not include any distribution costs
4 for that class. In the construction expenditure
5 forecast, the 66 kV projects are included in
6 transmission category unless it's a 66 kV line running
7 to, like, a new substation that's going to serve
8 distribution load. In that case, since it's a
9 distribution substation, and a 66 kV connector, they
10 throw the 66 kV connector in with the substation.

11 So it's -- it -- tho -- that load
12 should not be included as being a driver for the
13 distribution substations, the feeders, the line
14 transformers. They don't use any of that stuff. So
15 between the transmission and the -- the high-voltage
16 transmission and the -- the sub transmission
17 customers, is something between 20 and 27 percent of
18 sales go to those customers to piece together exactly
19 what percentage of the load growth that the Company
20 was forecasting. It was from those -- those rate
21 classes, because the -- the load forecast doesn't work
22 by rate class. It has other divisions, but it's a --
23 a significant difference.

24 Okay. Moving on to transmission and
25 distribution O & M, the rebuttal says that O & M costs

1 amount to only 1 to 2 percent of incremental capital
2 costs, but the carrying that they use for the
3 transmission and distribution is only about 4 percent.
4 So if you added 1 or 2 percent, then you'd be adding a
5 quarter or a half to the -- to the estimated cost, so
6 I'm a little puzzled by why Hydro, in its rebuttal,
7 thinks that this is not a -- a consequential number.

8 Okay. Moving on to generation. As the
9 Board knows, the information available to the parties
10 is quite limited in this regard. And that's partly
11 because Hydro sort of made this assertion that its
12 marginal cost was similar to the export price, and
13 since the export price is confidential, I had to keep
14 the marginal cost -- marginal generation cost
15 confidential. If they hadn't said that, they could
16 have talked about the marginal cost, which is not
17 directly based on the export price, but that's the
18 situation we're in.

19 And while Daymark rev -- reviewed the
20 export price forecast, it didn't review the
21 application of marginal cost, so we don't really know
22 first, which of the marginal costs have been filed in
23 this case contain which of the errors that Daymark
24 identified, but we do know that the Hydro assumes a
25 hundred percent load factor for -- for load for the --

1 the generation marginal cost. And that has the
2 problem that, well, first, to the extent that you're
3 including capacity costs, you're spreading that out
4 over too many kilowatt hours, and so when you say --
5 talk about the cent per kilowatt hour cost for
6 generation capacity, it's been reduced.

7 In the case of residential, the
8 residential load, it's being reduced by about 50
9 percent compared to what it -- what it should be. But
10 also, you're assuming that load shapes -- customer
11 load shapes are flat in terms of energy use, and
12 therefore, you're using -- the residential customers,
13 for example, are using just as much at four o'clock in
14 the morning in April as they are at peak times in the
15 winter, or high load times on summer afternoons.

16 And again, that's not a realistic
17 modelling of -- of the system. And as -- as I said,
18 Daymark has a lot -- has several critiques of the
19 export price forecast, and we don't really know which
20 of the marginal costs have which of those problems,
21 because Daymark was apparently not asked to look at
22 how that related to the marginal cost forecast.

23 The next slide, the -- Hydro has
24 provided, what it calls an update to the marginal
25 generation costs in which they explicitly take out any

1 firmness premium, reduce the capacity costs by
2 assuming that there is no value to capacity in -- in
3 any of their export markets ever, that the cost of
4 capacity will be a combustion turbine built by
5 Manitoba Hydro in 2030, with relatively low cost of
6 capital as compared to, say, a merchant plant in
7 Ontario, or even a -- a utility plant built in -- in
8 Minnesota. And Daymark estimates that MISO will need
9 capacity about the year 3 their substantial costs for
10 -- for new capacity in areas that have -- have needed
11 capacity in -- in PJM, which serves the mid-Atlantic
12 into the Midwest, and the ISO New England, which
13 serves New England.

14 When new capacity is needed, the price
15 that the -- those pools, those transmission
16 organizations have paid for capacity have been on the
17 order of ninety (90) to a hundred and twenty dollars
18 (\$120) Canadian per kilowatt year, and Hydro still
19 assumes it's unrealistic flat load.

20 Okay. The next page summarizes the
21 marginal costs from Hydro's filing, the filing values
22 as I corrected them from the -- the revised Hydro
23 values, and again, with my corrections, and compares
24 those to the proposed energy rate for each class for
25 2018. And with the corrections that -- that I put

1 forth, and again, my analysis can't be complete
2 because I don't have access to the marginal cost and -
3 - and some T and D data and load data is -- wasn't
4 available to me, but with my corrections all of the
5 energy rates are lower than marginal cost. And it
6 makes sense to increase those energy rates to move
7 towards giving an adequate price signal.

8 With Hydro's numbers, the same is true
9 for every class except residential. So the -- my
10 argument that you need to increase the energy rates
11 for nonresidential classes, and that's one (1) reason
12 for decreasing the demand charges, applies even with
13 Hydro's estimates of marginal cost.

14 And finally on the demand charge issue
15 --

16 THE CHAIRPERSON: Sorry, Mr. -- Mr. --
17 sorry, Mr. Chernick.

18 MR. PAUL CHERNICK: Oh, sure.

19 THE CHAIRPERSON: Can I just ask you a
20 question on page 21?

21 MR. PAUL CHERNICK: Yeah.

22 THE CHAIRPERSON: I'm a little lost on
23 this. What are the corrections based on?

24 MR. PAUL CHERNICK: The corrections
25 are the transmission and distribution costs.

1 THE CHAIRPERSON: Okay.

2 MR. PAUL CHERNICK: The load factor
3 assumption, that's a -- that's a big one (1), and
4 inclusion of environmental costs using the -- well,
5 there's a discussion in my evidence about how I --

6 THE CHAIRPERSON: Okay.

7 MR. PAUL CHERNICK: -- I did that.

8 THE CHAIRPERSON: Yeah. Thank you.

9 MR. PAUL CHERNICK: The environmental
10 costs amount to about two-point-nine (2.9) cents a
11 kilowatt hour. And even if that -- that environmental
12 component were considerably smaller, the residential
13 marginal cost would still be above the 2018 energy
14 rate.

15 All right. Ready for the -- I believe
16 this is the last slide. Okay. So in my -- my pre-
17 filed evidence I explained the problems with demand
18 charges, which are basically a very old-fashioned
19 attempt to -- to represent time of day, time of use
20 pricing to reward customers with flatter load shapes.
21 Those rates were developed when technology was much
22 less advanced than it is today.

23 And unfortunately, the -- the rates
24 encourage customers to do things, but not the right
25 things, to shift load off of their monthly peak, but

1 perhaps on to other high load hours. Perhaps even
2 from the customer's peak at a time that's not a
3 problem for the system, because it starts up its
4 equipment very early in the morning or it's an
5 entertainment venue that has its maximum loads 9:00 or
6 10:00 at night, to shift it off their peak onto some
7 other hour that may be higher load and more
8 problematic for the system.

9 Demand charges are very hard for
10 customers to respond to, even if they were giving
11 useful signals because if you have one (1) problem, if
12 your -- if your power supply goes out briefly and you
13 have to restart your equipment or you have an
14 equipment problem and -- and you shut down and you
15 have to start things up again you're going to hit a
16 peak for the month regardless of the fact that you've
17 controlled your load every other day.

18 The revenue that goes into demand
19 charges is not available for energy charges, which
20 would help in efficiency. And there are now
21 alternatives available, which are of trivial cost for
22 the larger customers: time of use rates, critical
23 peak pricing that charges a high rate at times when
24 parts of the system are heavily stressed, and real-
25 time pricing that follows daily or even hourly changes

1 in availability of generation and market prices.

2 Was there a question from the Board?

3 Somebody looked a little puzzled.

4 Hydro's rebuttal really doesn't respond
5 to any of my points. There is a description of demand
6 charges as if they were charging customers for their
7 contribution to demand costs. But Hydro is very
8 clear, and -- and I agree, that customer maximum
9 demand, what's being measured by a demand charge,
10 doesn't drive any significant portion of real cost.
11 Hydro doesn't use customer maximum demands in the cost
12 of service study, or in the marginal cost analysis.

13 And when we asked about what Hydro
14 thinks is driven by -- what costs are driven by
15 customer maximum demand they said, Well, I've got the
16 quotes there. They said, Absolutely not. The
17 transmission is not driven by that, and distribution
18 is driven by the coincident peak demand of all the
19 customers in the study area that is serving some piece
20 of equipment that may be getting overloaded.

21 So there's no reason to continue
22 increasing demand charges and over time they probably
23 ought to even be decreased, but during this period of
24 fairly rapid rate increases it -- it may be sufficient
25 to simply put the increases in the nonresidential

1 class and to the energy charges. And that completes
2 my opening statement.

3 THE CHAIRPERSON: Does anybody have
4 any questions? Any questions?

5

6 (BRIEF PAUSE)

7

8 BOARD MEMBER GRANT: Just a couple of
9 questions. In your rate design proposal you would
10 adjust rates simply within the residential class? In
11 a sense the subsidy towards low-income consumers is
12 coming -- I'll come over there.

13 The subsidy to low income consumers is
14 coming strictly from the residential consumers? In a
15 -- in a sense there's no transfer -- income transfer
16 coming from nonresidential?

17 MR. PAUL CHERNICK: Well, I do the
18 calculations both ways. And let me get back to the
19 appropriate page. Okay. For -- for -- on page 7, for
20 example, I calculate that for the low income discount
21 it would cost about one (1) cent per kilowatt hour for
22 the other customers, other residential customers, the
23 non-LICO residential customers, to cover that cost.
24 If you spread that across all of the non-LICO
25 customers other than the -- the SEP program, which is

1 based on market prices, then the recovery rate would
2 drop from about one (1) cent to about a quarter of a
3 cent.

4 So that -- that is an option that I --
5 I laid out for the -- the Board. I think as a matter
6 of policy, it probably makes sense to spread the cost
7 more widely. The -- if this were a program being run
8 through some other provincial agency the -- the
9 revenues would be coming from general tax revenues,
10 presumably, and therefore from all ratepayers. I
11 think the same kind of logic applies here. This is a
12 general problem. Just as if you -- for those -- those
13 jurisdictions that are facing difficulty retaining
14 industrial load, it's typically the case that all
15 customers help to pay for any reduction in rates to
16 keep indust -- vulnerable industrial customers online.

17 BOARD MEMBER GRANT: And on Friday, I
18 guess it was, we -- there was a presentation by a
19 woman who indicated that -- I suspect she's in that
20 category, being energy poor. But her utility costs
21 were embedded in her rent.

22 Would this reach down to her?

23 MR. PAUL CHERNICK: Well, that -- that
24 sort of depends on how the -- the rental market
25 operates, the -- and -- and whether that person is in

1 a dedicated low income facility. It certainly would
2 be easy enough to say the same kind of discount
3 applies to multifamily housing that is specifically
4 dedicated low income. Or --

5 BOARD MEMBER GRANT: Or if --

6 MR. PAUL CHERNICK: -- or even if the
7 landlord demonstrates that more than 70 percent of the
8 -- the residences are -- the residents are -- are
9 eligible.

10 BOARD MEMBER GRANT: I'm sorry. The
11 last one (1) is this perennial subsidy versus price
12 change, and what's the most effective way of
13 addressing issues of this nature. And, you know, I --
14 I take your point that the distortions can be
15 minimized, but they're still there, the price
16 distortion.

17 So why not -- isn't adjusting rates an
18 efficient way of getting at the problem?

19 And -- and I would throw in another
20 consideration. You know, if you're poor, you're poor.
21 It doesn't matter which commodity is driving up your
22 costs. And so you might have food security problems;
23 we'll give you food stamps. And now you're going to
24 be energy poor; we'll give you energy stamps.

25 I mean, why not just address it through

1 an income transfer as opposed to playing with the
2 rates?

3 MR. PAUL CHERNICK: Well, if we were
4 in a legislative hearing I -- I think I would agree
5 with you on that point, but we're not. And if you
6 think that the legislature is about to solve this
7 problem in some other way that's more direct, that's -
8 - that would be fine. Then there'd been no need to --
9 to deal with it.

10 But as I said, there are a limited
11 number of tools available to the Board. And I
12 understand that you have the authority to take this
13 kind of factor into account in setting rates. And I
14 don't think the argument that some other part of
15 government could do this better is an excuse for not
16 doing it, where there is no evidence that the other
17 part of the government is going to do it. And they
18 may have reasons for not moving as well, having to do
19 with bureaucracy, public perception, or whatever.

20 As to your point about if you're poor,
21 you're poor and it doesn't matter what it is that's --
22 the -- which of your costs are burdening you. I agree
23 with that. And this design is not limited to people
24 with high electric or even total energy burdens. The
25 way I've designed this, if you're low income you save

1 about a hundred dollars (\$100) a year by not paying a
2 basic charge. And you pay -- you save something
3 comparable from your lower first block. And even if
4 you're a relatively small electricity consumer and
5 you're not using much about that first block, and this
6 is not your biggest financial problem, it's still
7 going to help you.

8 THE CHAIRPERSON: Mr. Chernick, what
9 are -- what are the jurisdictions that have applied
10 the -- the proposal that's set out in table -- sorry,
11 on page 6?

12 MR. PAUL CHERNICK: I'm not sure that
13 anybody has exactly this rate design.

14 THE CHAIRPERSON: Yeah.

15 MR. PAUL CHERNICK: But -- and I --
16 and I -- I don't have a list of -- of jurisdictions
17 that have -- assuming you're talking about low income
18 --

19 THE CHAIRPERSON: Yeah. No, I'm
20 talking about the -- the block charges for low income.
21 The way you've got it set up or --

22 MR. PAUL CHERNICK: Yeah.

23 THE CHAIRPERSON: -- or that concept.

24 MR. PAUL CHERNICK: If you'd like, I
25 could get that to you in an undertaking. I just -- I

1 don't have it readily to hand. I -- I know that in
2 Massachusetts, for example, low income customers don't
3 pay the basic charge and have a -- I think they have
4 just a lower distribution rate overall. It's
5 different in the -- in the restructured states because
6 a large part of the bill is for generation services,
7 which is no longer regulated, so the -- you have less
8 room to play with some of these things.

9 THE CHAIRPERSON: So -- so,
10 essentially, would I be correct that you actually have
11 to look at the dynamics of each jurisdiction. And
12 it's difficult to compare the jurisdictions because
13 they have different programs. They may have more than
14 one (1) party providing services and things of that
15 nature.

16 MR. PAUL CHERNICK: Yes, I -- I would
17 say you -- you can find more comparable situations.
18 You can find situations in which you say, Well, why
19 wouldn't the state have done it this way? Or, Why
20 doesn't Ontario do it that way? Well, they've got a
21 different market structure than you do, so maybe they
22 can't do quite what you can do.

23 But you can certainly find a lot of
24 jurisdictions that do something along these lines, and
25 many of them start with removing the basic charge and

1 then have various other adjustments.

2 I wish I could explain to you off the
3 top of my head California's rate design, but
4 California has a great love for complexity, and I'm
5 not sure I would get all the parts complete. But they
6 also have an inclining block rate and a greater
7 discount for the low income customers in those -- they
8 have a -- a provision in their rates called "CARE,"
9 which I think is an acronym for something. But
10 basically it's the -- the low income discount is
11 concentrated in the earlier blocks.

12 THE CHAIRPERSON: Okay. Could you
13 comment, we've heard in this hearing so far, in
14 relation to bill affordability, a variety of
15 definitions of what the standard should be to measure
16 energy poverty. We -- we've seen LICO-125. We've
17 seen 6 percent of -- of income, 10 percent of income.
18 We've had a definition that's been approved by a
19 stakeholder committee.

20 Am I correct that LICO-125 is -- is it
21 adopted as a standard by many simply because it's been
22 used? It's -- it's part of Statistics Canada, other
23 people use it, and it's just -- it's on a commentary
24 that it's the best. But in terms of sta --
25 statistically driven information, it's been around a

1 long time and people rely on it.

2 MR. PAUL CHERNICK: And I understand
3 that it's used in the Power Smart Program for
4 eligibility for the more favourable low income
5 treatment.

6 THE CHAIRPERSON: Okay.

7 MR. PAUL CHERNICK: So it's -- it's a
8 convenient number to pick. Again, it's not an energy
9 poverty measure as -- as I discussed with Mr. Grant,
10 but --

11 THE CHAIRPERSON: Yeah.

12 MR. PAUL CHERNICK: -- it's -- it's a
13 poverty measure.

14 THE CHAIRPERSON: Right.

15 MR. PAUL CHERNICK: And those two (2)
16 concepts sort of go in different directions. And
17 there -- I -- I suppose there are arguments going each
18 way. And one (1) could certainly have a stepped low
19 income program and says that if you're under twice the
20 poverty level you get a one (1) cent discount. And if
21 you're under 150 percent, you get a two (2) cent. And
22 if you're under 125 then you get four cents (4). If
23 you wanted to get more complicated, and that might be
24 something the Board would want to do in a later GRA.

25 But I think I've introduced enough

1 complication in the tables that we're looking at here.
2 Although, if you'd like more I can certainly give you
3 more. And picking a number and saying, Above this,
4 you don't need any help. And once you get below this
5 --

6 THE CHAIRPERSON: M-hm.

7 MR. PAUL CHERNICK: -- fine line then
8 you do need help. That's always going to be an
9 arbitrary call.

10 THE CHAIRPERSON: Yeah. Any
11 questions? Yes, Ms. Kapitany...?

12 THE VICE-CHAIRPERSON: So, Mr.
13 Chernick, on page 8 of your presentation it seems like
14 you lay out a pretty key part of your argument. And
15 it's -- I -- correct me if I'm wrong, but I think
16 you're saying that if the energy price is less than
17 marginal cost, signals are distorted. And that
18 because Manitoba Hydro underestimates marginal cost
19 that compounds the signal distortion.

20 Is that really the key of your argument
21 here?

22 MR. PAUL CHERNICK: That the -- well,
23 since they -- they understate marginal cost, when you
24 compare their estimate of marginal cost to rates it
25 looks like the residential rate is high enough to give

1 an appropriate price signal, and I disagree with that.
2 But even if you just look at -- at -- for all the
3 nonresidential classes you look at Hydro's estimates
4 of marginal cost. Even without even the simplest of
5 corrections then you would conclude that customers are
6 not being given strong enough incentive to conserve.

7

8

(BRIEF PAUSE)

9

10 BOARD MEMBER MCKAY: I -- I'm a little
11 bit curious about the -- how -- what you're proposing
12 works for families that have just electri --
13 electricity for space heating.

14 Like, you were talking about only the
15 first 500 kilowatts?

16 MR. PAUL CHERNICK: Yeah.

17 BOARD MEMBER MCKAY: On average, do
18 you know what a family up north would use for
19 electricity that's only reliant on hydroelectricity?

20 MR. PAUL CHERNICK: Well, for a -- for
21 the non-low income I -- I suggest a discount in the
22 first 500 kilowatt hours in the winter and -- and
23 smaller amounts in the shoulder months. And you can
24 see that on page 6 or 7. And it's -- that's under the
25 non-LICO energy space -- electric space heat. For the

1 -- the low income, I propose a 500 kilowatt hour
2 allowance in every month plus the space heating
3 allowance. So in the winter months there'd be 1,000
4 kilowatt hours.

5 Now, my objective was to not include a
6 discount for all of the energy for most customers in -
7 - in any of these -- these blocks, because I wanted to
8 maintain the conservation incentive. But there's a
9 substantial discount, four (4) cents a kilowatt hour,
10 in that initial block. So you may be using 2 or 3,000
11 kilowatt hours to heat your home in the winter months,
12 but you're getting a big discount on the first
13 thousand.

14 And that's my attempt here to reduce
15 that total bill. In terms of the size of the cheque
16 you write it doesn't really matter whether the
17 discount is -- is in the first block or spread out
18 over all your usage. But in terms of the conservation
19 incentive, it matters quite a bit.

20 BOARD MEMBER MCKAY: Okay. Thank you.

21 THE CHAIRPERSON: Ms. Kapitany...?

22 THE VICE-CHAIRPERSON: Yeah, Mr.
23 Chernick, we heard Manitoba Hydro's evidence last week
24 that they are not well-placed to determine which
25 customers are low income and which ones aren't. So

1 I'd like your comment on that. And also in your
2 direct evidence you had said on page 34 that one (1)
3 of the things that Manitoba Hydro could do would be to
4 limit the number of people that would be in the -- the
5 low income category for reductions. And I'd like your
6 comment on that, please, if you can give just a little
7 more insight into that.

8 MR. PAUL CHERNICK: Okay. Well, let's
9 start with the second one (1) because that's -- that's
10 it's pretty straightforward. Hydro expressed some
11 concern that the -- the enrollment in low income could
12 turn out to be -- the Low Income Program could be much
13 higher than they expected, and that they'd wind up
14 with a much larger revenue loss than they had
15 protected.

16 And my response to that was, Well,
17 first of all, you're coming in every year for a rate
18 increase for the next several years. So you're not
19 going to get to have much of a loss before you have a
20 chance to make it up. Secondly, Hydro could ask for
21 an explicit deferral mechanism or something to make up
22 for the difference between their projection of low
23 income participation and their -- and the actual
24 participation.

25 And third, if the other approaches

1 didn't work for some reason, Hydro could just say,
2 Okay. We're going to sign up so many customers per
3 month in this program. And if you get in the waiting
4 list and -- and you -- you know, you're beyond that
5 number, then we'll get to the next month or whatever.
6 And that just limits their vulnerability to a huge
7 wave of -- of customers signing up before the next
8 time they can reflect that reality in -- in their rate
9 design.

10 THE VICE-CHAIRPERSON: How would you
11 see equity in a system like that?

12 MR. PAUL CHERNICK: Well, the
13 important thing is that everybody would be included
14 within a year or so of signing up. And they're better
15 off for having the program than not having the
16 program.

17 But if Hydro is -- is justified in its
18 concern about the revenue loss, and if that would
19 really be a problem in terms of their finances --
20 their financial condition and the regulatory process,
21 then this is a way of getting people onto this rate
22 but not so quickly that it destabilizes Hydro's
23 finances.

24 Personally, I doubt that that's
25 necessary. I think the fact that we're expecting a

1 rate increase every year and a-- and a rate filing
2 every two (2) years for the foreseeable future
3 indicates that -- that this can be handled in a normal
4 regulatory process. And I'm not convinced that you
5 need any special provisions, but if you did that would
6 be a way of dealing with it.

7 And it's very similar to what some
8 utilities have done with their energy efficiency
9 programs. They have a budget. If too many people
10 sign up they wind up on the waiting list and they get
11 served the next year. In terms of equity, people wind
12 up in different situations but not because of any
13 explicit discrimination, but just because of how
14 quickly they moved, how quickly they found out about
15 the program.

16 So I don't think it's inequitable. I
17 think it's -- it would be better if people could get
18 on the program very quickly. Although, it -- there
19 may be some -- some lag in Hydro's verification of
20 income level. And, unfortunately, I don't know enough
21 about the responsibility of various government
22 agencies to know whether there's somebody in Manitoba
23 who'd be able to provide that certification because
24 they provide other services that are income based,
25 which might make the whole -- whole system flow a

1 little more smoothly. It's a detail that I just
2 haven't addressed.

3 BOARD MEMBER GRANT: Can I jump in
4 once more? Bef -- just before I nitpick with your
5 plan a bit more I want to say -- and I mean, I think
6 this is really positive to actually put together a
7 plan. And it's -- I know it's more of an illustration
8 rather than some of the details, but I think it -- you
9 know, it's really the first time anyone's actually
10 proposed something in the -- so -- so that allows us
11 to pile on and --

12 MR. PAUL CHERNICK: Yes. Thank --
13 thank you for that.

14 BOARD MEMBER GRANT: One (1) problem
15 is -- is my understanding, there's only a -- there's a
16 single LICO for non-urban areas in all of Manitoba.
17 And so that would mean, you know, the same LICO is
18 applying to rural communities in southern Manitoba and
19 in the north where the cost of living would be, I'm
20 sure, enormously different.

21 So you'd also have to layer on this
22 additional administrative complexity, wouldn't you?
23 You'd have to have some sort of northern allowance to
24 add in or -- I mean, because I -- I would think LICO-
25 125 applied to areas in northern Manitoba would just

1 not be a very good indicator of low income?

2 MR. PAUL CHERNICK: Well, I'm sure
3 it's not a perfect indicator. I don't know to what
4 extent you can take geography into account in
5 eligibility for a rate or the -- the effect of a rate
6 given your legislative structure, which constrains
7 some of the things that I would otherwise suggest you
8 do. For example, for space heating. It would be nice
9 if you could have, essentially, climate zones and --
10 and have a higher allowance for customers further
11 north. But it's my understanding you can't do that
12 under current legislation.

13 BOARD MEMBER GRANT: We already are in
14 terms of we have different LICOs, urban and rural.
15 That's a locational issue. All you're saying is that
16 LICO-125 applied to northern communities is not --

17 MR. PAUL CHERNICK: Yeah. And -- and
18 I'm not arguing that that would be illegal. I'm just
19 saying I -- I don't know whether -- whether that would
20 be a problem or not. But my more fundamental response
21 to your question is, Well, it may not be perfect but
22 is it better than not having any low income allowance
23 at all.

24 And I think your point is that there
25 may be some people in northern Manitoba who have very

1 high costs of living and are -- are financially
2 stressed by that, who would not qualify. But some
3 poor people in the north would qualify and that would
4 be an improvement. And then you'd try and figure out,
5 well, how can we change the eligibility standards to
6 capture more of those people. And there may be other
7 pockets or sets with -- subsets within the province
8 that say, Well, there are a few thousand people here
9 who don't qualify, but they have high costs. Are
10 there other reasons we want to --

11 BOARD MEMBER GRANT: I take your
12 point. It's just that if you wanted to have a proper
13 equitable program, my concern is the administrative
14 complexity of it.

15 MR. PAUL CHERNICK: Right.

16 BOARD MEMBER GRANT: You know, you
17 have the concern -- you know, northern non-renter,
18 renter, and so whether that becomes in itself the
19 inefficiencies administratively undermine the -- the
20 benefits. But -- but, anyway --

21 MR. PAUL CHERNICK: And --

22 BOARD MEMBER GRANT: -- thanks for
23 proposing those.

24 MR. PAUL CHERNICK: -- and there are
25 jurisdictions that also apply discounts for people who

1 have energy intensive medical equipment, you know, who
2 have respirators or whatever that are -- that require
3 a lot of energy. And you can layer a lot of things
4 on. I suggest that you -- you start simple, rather
5 than try to figure out all the things you'd like to do
6 and all of the factors you'd like to take into
7 account. And then maybe spend another ten (10) years
8 thinking about it before you do anything.

9 THE CHAIRPERSON: Thank you, Mr. --
10 oh, sorry. Sorry, you have a question? Okay.

11 BOARD MEMBER MCKAY: I cannot resist
12 the last comment, taking another ten (10) years if
13 we're going to be changing things. I don't think
14 would be appropriate. I'm gonna suggest something,
15 just in terms of possibilities. We have what's called
16 a Northern Resident Allowance.

17 Is there -- or can there be some work
18 done on your rate design to accommodate a northern
19 resident heating allowance? And I'm going to leave it
20 at that. Thank you.

21 MR. PAUL CHERNICK: Was -- was that
22 actually a question or was that just your -- your
23 suggestion that that might be something to think
24 about?

25 BOARD MEMBER MCKAY: I want to figure

1 out whe -- whether there can be a -- what do you call
2 the things? An undertaking. Thank you. But I'll
3 check with our legal after -- during lun -- during the
4 break, whether I ask for an undertaking or who asks
5 for an undertaking, or whether you take the initiative
6 then ask for an undertaking.

7 MR. PAUL CHERNICK: And -- and I don't
8 have any objection to -- to the undertaking. I -- I'm
9 wondering whether this is primarily a legal question
10 that you're asking my attorney whether using the --
11 the Northern Allowance as a qualification for the rate
12 would be consistent with the prohibition on zonal
13 rates within -- for electricity. And I don't -- I
14 don't have any insight into that personally.

15 MR. WILLIAM GANGE: Ms. McKay, how
16 about if I -- if I make a suggestion that we leave
17 that to -- to discussion between counsel. And if --
18 if it's appropriate, Mr. -- Mr. Chernick may well
19 provide you his thoughts with respect to the question
20 of the Northern Resident Allowance.

21 BOARD MEMBER MCKAY: Yes, that's
22 fine. Thank you.

23 MR. WILLIAM GANGE: Thank you.

24 THE CHAIRPERSON: Thank you. We're
25 going to take a break for fifteen (15) minutes and

1 then we'll start with cross-examination by the
2 Intervenors. Thank you.

3

4 --- Upon recessing at 10:35 a.m.

5 --- Upon resuming at 10:54 a.m.

6

7 THE CHAIRPERSON: Mr. Luk...?

8

9 CROSS-EXAMINATION BY MR. SENWUNG LUK:

10 MR. SENWUNG LUK: Thank you, Chair
11 Gabor. Good morning members of the panel. Good
12 morning my co -- my fellow counsel and good morning,
13 Mr. Chernick. My name is Senwung Luk and I'm the
14 lawyer representing the Assembly of Manitoba Chiefs,
15 and we are -- my client is an organization that
16 represents sixty-two (62) out of sixty-three (63) of
17 the First Nations in Manitoba and I thank you in
18 advance for answering our questions this morning.

19 So I'd like to begin by confirming with
20 you one (1) of the animating principles behind the
21 discussion that -- that we've been having about rate
22 design, and I don't need to take you to this if --
23 because I think you'll agree, you said in your report:

24 "The Board has expressed concern
25 about rates that would

1 disproportionately burden low income
2 high-energy use customers."

3 And I -- I take it that you would agree
4 that a rate design should avoid this kind of
5 disproportionate burden on low income/high-energy use
6 customers?

7 MR. PAUL CHERNICK: That certainly
8 would be a good idea, yes.

9 MR. SENWUNG LUK: Okay, great. And so
10 I'd like to take you to the rate designs that you've
11 put forward and I know there -- there are a few
12 versions floating around. I mean, I think that
13 probably the -- the most updated version is slide 7
14 from your presentation today. If or -- in the
15 alternative, we could look at table 6 of your report.
16 I don't know which one you prefer.

17 MR. PAUL CHERNICK: Slide 7 is fine.

18 MR. SENWUNG LUK: Slide 7 is fine.

19 Okay, that's what we'll go with then.

20 So I understand that you are making a
21 number of proposals for rate designs and I'd like to
22 just clarify with you to start out with how the rate
23 proposals that you've put forward fit together with
24 each other. So I -- I see from slide 7 that I think
25 there are four (4) different proposals on the table.

1 Are you recommending that the Board
2 accepts all of these proposals or do you think it
3 would be helpful in your opinion for the Board to
4 accept one (1) but not the others, for instance, the
5 LICO-125 all rate but not the other rate designs?

6 MR. PAUL CHERNICK: My suggestion
7 would be to accept all on of them there. Actually
8 they're really three (3) proposals. The LICO-125
9 electric space heat column is just the effect of
10 implementing both the electric space heat and the
11 LICO-125 discounts.

12 So, there's really three (3) proposals:
13 One for LICO, one for space heating and one for the --
14 the remainder of the residential class.

15 MR. SENWUNG LUK: Now, would it be
16 part of your recommendation that the Board should not
17 implement the LICO-125 all rate if it isn't also going
18 to implement the electric space heat rate?

19 So maybe I can rephrase that. Would --
20 would it be part of your recommendation to the Board
21 that it should avoid endorsing just the LICO-125 rate?

22 MR. PAUL CHERNICK: Well, I would
23 prefer to see all three (3) of these proposals go
24 forward, but I don't see any problem with only doing
25 the LICO-125 rate if that's all that the Board were

1 comfortable with at this point.

2 MR. SENWUNG LUK: Okay, thank you, Mr.
3 Chernick. So I -- I just like to explore that -- some
4 of the implications of only implementing the LICO-125
5 all rate. So just to confirm with you, this LICO-125
6 all rate, that's for a discounted block of 500
7 kilowatt hours of consumption per month where the
8 energy charge would -- would be reduced to \$.04 cents
9 a kilowatt hour and the rest of the ratepayer's
10 consumption would be charged at the rate proposed by
11 Manitoba Hydro, which is 8.196 cents.

12 That's -- that's accurate?

13 MR. PAUL CHERNICK: Yes, yes.

14 MR. SENWUNG LUK: And this rate would
15 be available to LICO-125 customers regardless of
16 whether they -- whether that consumption is -- is
17 electric space heat; is that --

18 MR. PAUL CHERNICK: That's correct.

19 MR. SENWUNG LUK: Okay. So if I could
20 ask Ms. Schubert to bring up pages 31 of Mr.
21 Chernick's report. I'm sorry, page 32. I apologize
22 that I've been using the printed page numbers. It
23 would be PDF page 34 I believe, just at the top there.
24 Thank you.

25 So I'd like to understand a bit better,

1 Mr. Chernick, why you've chosen 500 kilowatt hours, in
2 particular, not four -- not four ninety-nine not five-
3 0-one as -- as the size of the first block. And I
4 understand you -- you said in this part of your -- or
5 your report at printed page 32, that 500 kilowatt
6 hours is where the bill frequency analyses of Manitoba
7 Hydro indicate that about 94 percent of residential
8 usage was in bills over 500 kilowatt hours. So that
9 most of that usage block is infra-marginal. I -- I
10 think I'm quoting from you there.

11 So that the rationale, I understand it,
12 is that even for low income customers, customers who
13 are at LICO-125, they would be receiving price signals
14 above 500 kilowatt hours. Is that correct?

15 MR. PAUL CHERNICK: That's correct.

16 MR. SENWUNG LUK: So that said, I just
17 like to explore the relationship between that and the
18 idea of infra-marginality, which is the -- the word
19 that -- that you've used on the top of page 32 there.

20 So you -- you say that 94 percent of
21 residential customers are infra-marginal at 500
22 kilowatt hours per month.

23 MR. PAUL CHERNICK: It's actually 94
24 percent of the consumption is.

25 MR. SENWUNG LUK: Yes.

1 MR. PAUL CHERNICK: You may have a lot
2 of small customers who -- who you use less than 500
3 kilowatt hours, but most of the energy, the vast
4 majority of the energy is in bills over 500 kilowatt
5 hours.

6 MR. SENWUNG LUK: So of LICO-125
7 customers, 94 percent of the -- or 94 percent of their
8 energy usage is below 500 kilowatt hours a month; is
9 that an accurate summary --

10 MR. PAUL CHERNICK: Yes, I believe I
11 was working from Hydro data for all customers. I
12 don't think they had a bill frequency broken out by --
13 by income level, but that was my -- my best guess that
14 that -- the numbers would be similar.

15 MR. SENWUNG LUK: Sorry, if I could
16 just understand that a bit more. So you -- you're --
17 when you say "bill frequency analyses," you are
18 looking at the bill frequency analyses of Hydro
19 customers generally and not of the subset of LICO-125
20 customers?

21 MR. PAUL CHERNICK: Yes.

22 MR. SENWUNG LUK: Okay. So you
23 continue in your report on -- on the same page. You
24 say that:

25 "Even though the low income

1 customers would receive a discount
2 on their bills, most of their energy
3 decisions to use more or less energy
4 would result in the customer facing
5 the full retail rate."

6 So, I take that to mean that for
7 customers generally they are -- they don't really have
8 a choice about using up to 500 kilowatt hours? Their
9 choices arise --

10 MR. PAUL CHERNICK: If you were using
11 about a thousand kilowatt hours a month, then if you
12 change that by a hundred kilowatt hours, up or down,
13 you're not going to change the -- the number of
14 kilowatt hours you're getting from your first block of
15 500 kilowatt hours.

16 You don't -- you don't get to pick from
17 the -- from your rate which -- which kilowatt hours
18 you're going to not use, you just use fewer kilowatt
19 hours and the -- the rate calculation gives you 500
20 kilowatt hours at the low rate and anything above that
21 at the higher rate.

22 So you use more, you pay the retail
23 rate -- regular retail rate. You use less you pay --
24 you save the regular rate, unless you cut your
25 consumption so much that you get under the 500

1 kilowatt hours.

2 MR. SENWUNG LUK: I -- I understand
3 that, Mr. Chernick, but I'm -- I'm trying to
4 understand how you chose 500 in particular --

5 MR. PAUL CHERNICK: Okay.

6 MR. SENWUNG LUK: -- and -- and how
7 that's related conceptually to this idea of energy
8 decisions and I take what you're saying here at the
9 top of page 32 to mean that the -- the -- when you say
10 most of their energy decisions would result in the
11 customer facing the full retail energy rate, most of
12 the energy decisions of the customers you're talking
13 about are the energy decisions at over 500 hours?

14 MR. PAUL CHERNICK: Yes, exactly. As
15 to your earlier question about why 500 not 499 or 501,
16 I was working from a bill frequency analysis that had
17 a number of bills in certain bins, one of which ended
18 at 500. I don't think I would've picked 499 in any
19 case, but I couldn't have picked 400 without doing
20 some interpolation.

21 And my objective was to give a
22 substantial discount to LICO-125 customers but without
23 either having the energy rate get really close to zero
24 or having the discounted block affecting a large per -
25 - a significant percentage of the -- of the energy

1 being used.

2 So 500 kilowatt hours seemed to be a
3 reasonable compromise there. It's nothing magical and
4 I can't say that it's superior to 400 or 600, in part,
5 because I don't have the data but also because it's a
6 -- basically a judgment call about the trade-off
7 between how large a reduction you want to give to the
8 low-income customers and the extent to which you're
9 willing to include a -- a few more customers in the --
10 in the group that's facing a low marginal rate.

11 MR. SENWUNG LUK: Fair enough and I --
12 I appreciate there are a lot of complexities to this,
13 but the question -- the concept I'm trying to sharpen
14 here is this idea of energy decisions which you've
15 used in your report.

16 And so what -- what I've heard you say
17 is that above 500 kilowatt hours per month there --
18 there is some scope for energy decisions.

19 Is it fair to say that below 500 there
20 generally is less of a scope of --

21 MR. PAUL CHERNICK: Well, that -- not
22 many of the decisions being made by those customers
23 are going to reduce their usage below 500 kilowatt
24 hours, and therefore, save them only four point
25 something cents rather than the eight point something

1 cents.

2 MR. SENWUNG LUK: And is it fair to
3 say that there isn't a lot of scope for energy
4 decision-making below 500 because that's sort of what
5 you need to run a reasonable modest household in a
6 place like Manitoba?

7 MR. PAUL CHERNICK: Well, weather is
8 really what you need or not. It's -- it's what the
9 vast majority of the -- of bills wind up being above.
10 I mean, it's a -- it's a relatively low usage and, in
11 fact, not a lot of bills fall under that and those
12 bills don't have much energy in them. So, it's not a
13 big deal in terms of the loss conservation effect.

14 MR. SENWUNG LUK: Thank you, Mr.
15 Chernick. So I -- I appreciate you probably have not
16 read every single word of the proceeding's transcripts
17 closely so --

18 MR. PAUL CHERNICK: My apologies.

19 MR. SENWUNG LUK: I don't -- I don't
20 think any apologies are -- are necessary, but there's
21 a lot to work through, for sure, but I -- I just like
22 to put to you that at this hearing we've heard
23 evidence that the housing on Indian reserves are
24 generally of a lower quality than the housing off
25 reserve. And that's it -- the on-reserve housing is

1 potentially more poorly constructed and more poorly
2 insulated.

3 Would you agree that those might be
4 factors that could lead to higher consumption?

5 MR. PAUL CHERNICK: Yes, and that,
6 first of all, Power Smart under Manitoba Hydro or the
7 successor manager should -- should really focus on
8 those low income/high use customers and get them
9 insulated and weather sealed so that their -- their
10 usages is -- is reduced. And that's especially for
11 the more northern part of the -- of the province on
12 reservation or off. I'm sure that there are low-
13 income people with not terribly efficient houses in --
14 inn other parts of -- of the province.

15 And yes, the -- the low insulation
16 levels, poor construction in general resulting in air
17 leakage, poor maintenance over time because the
18 landlord isn't interested in -- and the resident or
19 maybe the owner doesn't have the capital. Those are
20 real problems for low income households.

21 MR. SENWUNG LUK: And I take your
22 point that's a lot of these problems could be remedied
23 by a demand-side management program that -- that
24 upgraded the quality of the construction but until
25 such time as that kind of renovation has taken place,

1 would you agree that it's -- that the Board should be
2 taking the higher consumption level of this set of --
3 of infrastructure that's of lower quality, that it's -
4 - that it's something -- that that's a factor that the
5 Board should take into account in looking at rate
6 design?

7 MR. PAUL CHERNICK: Well, that's
8 certainly a desirable factor. I mean, there are legal
9 constraints in terms of geographic rates that don't
10 apply other places where they -- there certainly would
11 be a recognition of those factors.

12 And rate design even -- certainly at
13 the -- at the level of complexity that I've proposed
14 remains a relatively blunt tool and you've got people
15 -- you've got owners and you've got renters; you've
16 got rural and urban; you got southern and northern.
17 You have people at different income levels within
18 whatever category you determine is -- is low income,
19 and it's very hard to optimize for all of them.

20 And if there were -- if there were
21 three (3) kinds of customers and each of those kinds
22 had the same usage pattern within the group, it would
23 make this a lot simpler. But unfortunately, we -- or
24 in reality, we have a wide range of -- of customers
25 and there are trade-offs between, for example, giving

1 conservation signals and increasing the -- the amount
2 of energy that gets discounted.

3 If you're talking about low income
4 northern communities, very poor communities, then you
5 might be able to have a larger first block and I
6 wouldn't have any problem with that if that's
7 something that can -- can be designed. My con -- one
8 (1) of my concerns is that the Board not wait until
9 all of these things can be addressed before taking the
10 first step. I certainly wouldn't have any problem
11 with an enhancement to my proposal that would address
12 some -- some additional -- some particularly needy
13 groups or burdened groups more vigourously than my
14 proposal has.

15 MR. SENWUNG LUK: I -- I'll just put
16 it to you because I -- I recognize that not everybody
17 is necessarily familiar with the ins and outs of
18 Canadian constitutional law. But I'll just put it to
19 you that there -- there are North and -- there --
20 there are Indian reserves, as they're called in -- in
21 the federal legislation, that there -- there are
22 Indian reserves both in the north and the south of --
23 of the Province, and that they are also within a
24 separate -- constitutionally separate jurisdiction in
25 terms of being under federal jurisdiction for a number

1 of matters rather than -- rather than under provincial
2 jurisdiction.

3 Does that sound like a -- a fair --

4 THE CHAIRPERSON: Mr. Luk, I -- I'm
5 sorry to interrupt, but I -- I don't know if the
6 witness is here to give legal opinion to con -- on the
7 Canadian Constitution. I mean, I -- it -- I think
8 it's an important point, and you may want to have it
9 for final submission, but --

10 MR. SENWUNG LUK: Yes.

11 THE CHAIRPERSON: -- I'm -- I'm not
12 sure it's appropriate for this witness.

13 MR. SENWUNG LUK: That -- that's fair
14 enough, Chair. I -- I just wanted to -- to give fair
15 warning to the witness about this point in -- in case
16 he -- he had not been familiar with it before.

17

18 CONTINUED BY MR. SENWUNG LUK:

19 MR. SENWUNG LUK: Now going back to
20 your rate design of -- of the -- of the 500 kilowatt
21 hour block for the LICO-125, you -- you said that you
22 used Hydro's bill frequency analyses to arrive at that
23 level of consumption, and -- and you said that 94
24 percent of the con -- of -- of the usage is below five
25 hundred (500) per month.

1 I'd just like to confirm with you that
2 when you were --

3 MR. WILLIAM GANGE: I think -- Mr. --
4 I think it's 94 percent is above that level.

5 MR. SENWUNG LUK: Sorry.

6 MR. WILLIAM GANGE: It's not below
7 that level.

8

9 CONTINUED BY MR. SENWUNG LUK:

10 MR. SENWUNG LUK: I stand corrected.

11 MR. PAUL CHERNICK: I'm glad somebody
12 was listening carefully.

13 MR. SENWUNG LUK: Yes. So I'd just
14 like to confirm with you that when you did that
15 analysis, that you were looking at the bill data for
16 Manitoba Hydro residential customers generally, and
17 you didn't look at specific data relating to on-
18 reserve consumption?

19 MR. PAUL CHERNICK: That's true. I
20 did not have any of that data.

21 MR. SENWUNG LUK: And if I could ask
22 Ms. Schubert to pull up AMC/GAC Number 1.

23

24 (BRIEF PAUSE)

25

1 MR. SENWUNG LUK: Now, if you could
2 scroll back up to the preamble, please. Thank you.

3 Mr. Chernick, you stated in your report
4 that part of your design for the LICO-125 all -- rate
5 was reliant on the 2014 residential energy use survey,
6 and that you arrived at the average annual usage for
7 LICO125 customers as 14,484 kilowatt hours?

8 That's correct?

9 MR. PAUL CHERNICK: Yes.

10 MR. SENWUNG LUK: And we posed -- or
11 the Assembly of Manitoba Chiefs posed a question to
12 the Green Action Centre about -- about this
13 calculation, and we asked -- we asked you to calculate
14 the average consumption for on-reserve residential
15 customers. And if you could scroll down, Ms.
16 Schubert. Yes, thank you.

17 And the figure that was arrived at for
18 the average on-reserve consumption level was 19,506
19 kilowatt hours per year. So by my calculation, that
20 is about 35 percent higher than the forty (40) --
21 fourteen thousand four hundred and eighty-four
22 (14,484) figure for the -- for -- for the general --

23 MR. PAUL CHERNICK: Low income.

24 MR. SENWUNG LUK: -- low -- low income
25 --

1 MR. PAUL CHERNICK: Yes.

2 MR. SENWUNG LUK: -- consumption. So
3 does -- does that -- does 35 percent sound about right
4 to you, and the math that I'm using is --

5 MR. PAUL CHERNICK: Yes, it -- yeah,
6 that's -- that -- that looks about right.

7 MR. SENWUNG LUK: And this higher
8 level of consumption seems in line with the evidence
9 about the lower standard of housing construction on
10 reserve. That -- this -- this -- that's -- this
11 higher level of consumption would be what that kind of
12 thing would cause. Do you agree with that?

13 MR. PAUL CHERNICK: That the -- the
14 higher usage would be -- would --

15 MR. SENWUNG LUK: Could --

16 MR. PAUL CHERNICK: -- could result
17 from a lower -- lower quality of construction? Yes,
18 and -- and also that the reserves may have less access
19 to gas, and therefore more electric heating, and there
20 may be other -- and maybe dis -- distributed more to
21 the North than -- than the average low income
22 customer, and the household size -- the housing size
23 may be -- may be different. There may have -- may be
24 a lot of things, but certainly poor construction would
25 contribute to -- to that difference.

1 MR. SENWUNG LUK: Thank you, Mr.
2 Chernick. So given that there is higher average
3 consumption on reserve, would you agree that more of
4 that consumption, based on your LICO125 all rate, more
5 of that consumption would be billed the higher rate,
6 and less of that would be billed proportionally at --
7 at the discounted rate?

8 MR. PAUL CHERNICK: Right. That --
9 that would be the effect.

10 MR. SENWUNG LUK: And so, according to
11 -- to the calculation that -- that the Green Action
12 Centre has -- has arrived at, the average rate for an
13 -- for an on-reserve customer who -- who would be on
14 the LICO-125 rate would be seven point one -- one-five
15 cents per kilowatt hour, compared to six point six-
16 seven (6.67) for the off-reserve LICO-125 customers?

17 MR. PAUL CHERNICK: Yes, for the --
18 for these particular rates, yes.

19 MR. SENWUNG LUK: And by my
20 calculation, that means that the average on-reserve
21 LICO125 customer would be paying about 7 percent
22 higher than the off-reserve LICO-125 customer?

23 MR. PAUL CHERNICK: That's correct.

24

25

(BRIEF PAUSE)

1 MR. SENWUNG LUK: Is there any
2 principle of rate making that would justify this
3 distinction that -- that would result in these off-
4 reserve customers paying a -- a -- lower average rate
5 that the on-reserve customers?

6 MR. PAUL CHERNICK: Well, it certainly
7 wouldn't be an objective of the rate design. As we
8 discussed earlier, there are other considerations that
9 could cause it, which is -- is what's happened in this
10 case. If you have larger customers, then the
11 discount's going to affect a smaller percentage of
12 their usage, given the kind of design I have. And if
13 you have a -- a legal way of increasing that -- that
14 first block from 500 kilowatt hours to 700 kilo --
15 kilowatt hours or whatever for the -- the on-reserve
16 customers, then that might be a perfectly reasonable
17 approach.

18 MR. SENWUNG LUK: So you -- I think --
19 I take it you would agree that it might be appropriate
20 to have a different first block for on-reserve
21 customers? I -- I -- just confirm --

22 MR. PAUL CHERNICK: Again, if, you
23 know, if -- if you can do that within the constraints
24 of the law, and that's your business, not mine, then
25 that would be a reasonable thing to do. If you've got

1 very few kilowatt hours on the -- the reserve -- in
2 bills that are under 700 or 800 kilowatt hours, then
3 you could extend the -- the first block to a higher
4 level and give a larger discount to those customers,
5 reflecting the fact that -- that they have a higher
6 energy burden.

7 There -- it's a -- a group that we can
8 identify easily that has other financial problems. If
9 all that's true, then there's -- the rationale that
10 led to my rate design would also support those kinds
11 of enhancements.

12 MR. SENWUNG LUK: And just going back
13 for a minute to the idea of energy decisions. And I -
14 - I think we talked a bit about that concept as, you
15 know, that there is certain things that people do to
16 run their house, and lead a basic moderate life, and
17 that level of consumption isn't really something they
18 have too much control, over at least in the short run.
19 Would you -- and -- and I -- I think that's -- that's
20 kind of -- that's related to why you set the first
21 block for LICO-125 at the five hundred (500) level.

22 Would it be reasonable to say that for
23 a group of customers who live in lower than average
24 standard housing, that their envelope of the not
25 having energy decisions might be higher because it --

1 it simply takes more energy to run a -- a house that's
2 -- that's of lower standard?

3 MR. PAUL CHERNICK: I think you're --
4 you're thinking about this a little differently than I
5 am in that you're -- you're talking about what you
6 have control over, and I'm thinking about how big is
7 your bill. And if your bill is way past the
8 discounted block, then the discount shouldn't be
9 affecting your decisions about whether it's worth
10 going back to turn off the light, or adjust the
11 thermostat, or whatever.

12 But it's likely that with larger
13 consumption, you have a larger amount of monthly usage
14 that customers would rarely get down into for their
15 tail block, and therefore I get to the same conclusion
16 you get to, but I would use a -- a different --
17 different words.

18 The other thing is, you know, you keep
19 referring to these less efficient houses. To the
20 extent that it's a matter of poor insulation and a
21 leaky building, then it's really the space heating
22 component that you want to be thinking about. And if
23 you -- you might find that many of these customers use
24 less than 500 kilowatt hours in the summertime, but
25 that they use enormous amounts in the winter. And

1 therefore, I want to have a -- a rate design that
2 perhaps only had the 500 kilowatt hour discount in the
3 summer, and much larger space heating discounts in --
4 in winter months.

5 But again, I don't have enough data to
6 do anything. Even if it's in the record, I haven't
7 noticed it. I don't have enough data to do --
8 recommend anything specific, here.

9 MR. SENWUNG LUK: That's very helpful.
10 That's -- that's exactly the -- the next question that
11 I -- I was going to ask you was if -- Ms. Schubert,
12 could you pull up the slide 7 from today's deck again,
13 which is the -- the table of different rate proposals.

14 Would you agree with me then, Mr.
15 Chernick, that the LICO-125 ESH rate does a better job
16 of treating that kind of customer -- a customer who's
17 living in a -- a place without a lot of heating
18 options, that -- where there might be leaky houses,
19 and where there might be a lot of need for energy,
20 that that LICO-125 ESH rate does a better job than the
21 LICO-125 all rate of treating that kind of customer
22 fairly?

23 MR. PAUL CHERNICK: Yes. That's what
24 it was designed for.

25

1 (BRIEF PAUSE)

2

3 MR. SENWUNG LUK: So I'd like to move
4 on to talk about the ESH rates, the -- the two (2) ESH
5 -- or -- I'm sorry for the acronym -- the electric
6 space heating rates that -- that you've put forward.
7 And I'd like to understand a bit about the size of the
8 blocks again, of -- of how you arrived at the -- the
9 blocks that are set out in the two (2) electric space
10 heat rates.

11 So I understand that the LICO-125
12 electric space heat rate is simply the LICO-125 all
13 rate added together with the non-LICO ESH or electric
14 space heating rate. Is that correct?

15 MR. PAUL CHERNICK: Yes.

16 MR. SENWUNG LUK: So the -- the blocks
17 are -- are a sum of those two (2) columns that leads
18 to the third column being the first two (2) columns
19 added together? That sound fair?

20 MR. PAUL CHERNICK: Correct.

21 MR. SENWUNG LUK: And so I -- I'd like
22 to ask a bit about how you arrived at the -- the four
23 (4) blocks under the non-LICO electric space heating
24 rate. So nothing for the summer, one fifty (150) for
25 spring, two fifty (250) for fall, and five hundred

1 (500) for winter.

2 So if I understand correctly, part of
3 the justification for implementing an electric space
4 heating rate is -- I'll -- I'll quote from your
5 report:

6 "Many space heating customers have
7 limited options for switching fuels
8 and may face considerable barriers
9 to massively reducing their space
10 heating use."

11 So I -- I understand that -- that the
12 purpose of -- of designing an electric space heating
13 rate is to isolate that part of the customer's
14 consumption -- it's not really something that that
15 customer can do very much about -- and -- and use the
16 price signal on -- on the part that the customer might
17 be able to do something about. Is that fair?

18 MR. PAUL CHERNICK: Well, and also to
19 focus specifically on the space heating decision.
20 There are customers with or without electric space
21 heat who use a lot of electricity for other purposes.

22 And I didn't see any particular reason
23 to provide discounts for customers just for using a
24 lot of electricity for heating their pool or whatever.
25 So I looked at an estimate of the -- the seasonal

1 usage for -- for space heating specifically, and then
2 discounted a small portion of that, about 20 percent,
3 in each of the seasons. And that's how I got the
4 numbers.

5 MR. SENWUNG LUK: So if I could take
6 you to page -- printed page 35 of your report. That's
7 PDF page 37, lines 20 through 22. So you said in your
8 report that:

9 "I assume that the annual heating
10 use of an all electric customer is
11 14,500 kilowatt hours, based on the
12 difference between the average
13 heating and the average non-heating
14 customer in the Residential Survey."

15 I just want to confirm by "Residential
16 Survey" you're talking about the 2014 Residential
17 Energy Use Survey?

18 MR. PAUL CHERNICK: Yes.

19 MR. SENWUNG LUK: If I could bring up
20 -- Ms. Shubert, if -- if you could bring up AMC/MH-
21 Round 1, question 23, please.

22

23 (BRIEF PAUSE)

24

25 MR. SENWUNG LUK: And I'm looking for

1 page 2. I -- and what we see -- if you could scroll -
2 - can -- is there a way of scrolling so we see both of
3 these tables on the same screen? Probably not. Okay.
4 We could only turn every one (1) screen to portrait
5 mode. We'll work with -- work with what we've got.
6 Or maybe you can zoom out. Is that possible?

7

8

(BRIEF PAUSE)

9

10 MR. SENWUNG LUK: That's great. Thank
11 you. So, Mr. Chernick, the Information Request that
12 we have up on the screen is one (1) in which Manitoba
13 Hydro describes the 2014 Residential Energy Use
14 Survey, and whom it sampled. And I'll put it to you
15 that the 2014 REUS, the Residential Energy Use Survey,
16 interviewed four thousand seven hundred and seventy-
17 six (4,776) interviewees off reserve. And that's
18 thirteen hundred and twenty-three (1,323) plus thirty-
19 four-fifty-three (3,453), forty-seven-seventy-six
20 (4,776). And only thirty-five (35) on reserve
21 customers. That's twenty-three (23) plus twelve (12).

22

Does that seem accurate to you?

23

24

MR. PAUL CHERNICK: Yeah, that's what
these data seem to indicate, yes.

25

MR. SENWUNG LUK: I'll -- I'll put it

1 to you that the there are sixteen thousand three
2 hundred and forty-four (16,344) households on reserve,
3 out of a total of four hundred and ninety-four
4 thousand nine hundred and twelve (494,912) total
5 residential accounts that Manitoba Hydro has in the
6 province, which means that 3.3 percent of residential
7 accounts are on rese -- are on reserve. And I -- I --
8 well I -- I can take you to that data, but I'm hoping
9 that's --

10 MR. PAUL CHERNICK: Okay. That's
11 fine.

12 MR. SENWUNG LUK: -- something we can
13 agree on. However, the 2014 Residential Energy Use
14 Survey interviewed thirty-five (35) on reserve
15 households out of a total of four thousand seven
16 hundred and seventy-six (4,776) residential households
17 interviewed, which means that only 0.7 percent of
18 interviewees in the 2014 REUS were on reserve
19 households.

20 MR. PAUL CHERNICK: They do seem to be
21 under representing the reserves, yeah.

22 MR. SENWUNG LUK: So zero-point-seven
23 (0.7) of the interviewees in the 2014 survey were on
24 reserve, while 3.3 percent of the accounts are on
25 reserve.

1 MR. PAUL CHERNICK: M-hm.

2 MR. SENWUNG LUK: So would you agree
3 with me that the survey undercounts on reserve
4 residents by about a factor of five (5)?

5 MR. PAUL CHERNICK: Yes, something on
6 -- on that order. It's a -- it's a significant
7 undercounting and I don't know that you can have a lot
8 of confidence in the small sample size, especially
9 because the average usage from the sample seems to be
10 much higher than Hydro is reporting for the average
11 usage of on reserve customers total.

12 So it doesn't look like this a is very
13 representative sample for that purpose. Now, that --
14 they may never have had the intention of being able to
15 give you that -- give anybody that granularity so that
16 might -- may not have been a design parameter in the
17 surveying, but it limits the usefulness of these data.

18 MR. SENWUNG LUK: But I -- I take it
19 you would agree with me that the data that is
20 available does show a higher level of consumption on
21 reserve, either in -- in the annual kilowatt hour
22 measure, or in the kilowatt hour per square foot
23 measure when -- when you look at the on-reserve
24 customers versus the LICO -- I'm sorry -- versus the
25 off-reserve customers?

1 MR. PAUL CHERNICK: Yes.

2 MR. SENWUNG LUK: Based on what we
3 have here.

4 MR. PAUL CHERNICK: Yes, that --
5 that's certainly the case in --in this table, and it's
6 the case for the -- for the total billing data where
7 they come up to about nineteen thousand (19,000) for
8 an average, which is a lot lower than their -- than
9 survey data. But it's still considerably higher than
10 the -- than on reservation.

11 MR. SENWUNG LUK: Ms. Shubert, can you
12 bring up slide 7 again, please.

13 So, Mr. Chernick, I think you -- you
14 told us earlier that when you designed the non-LICO
15 electric space heat blocks you were looking at the
16 2014 Residential Energy Use Survey data.

17 Would you accept that the -- that those
18 blocks -- I think you agreed to earlier that those
19 blocks are meant to target the -- the amount that is
20 used by customers on electric space heating.

21 MR. PAUL CHERNICK: Ye -- yes, that's
22 a -- about 20 percent of the monthly space heating
23 usage.

24 MR. SENWUNG LUK: And given that the
25 2014 survey undercounts on reserve customers by a

1 factor of five (5), would you agree that these blocks
2 might not accurately represent the consumption
3 patterns for an on reserve customer?

4 MR. PAUL CHERNICK: Well, that could
5 be the case even if they had been represented because
6 they'd be di -- the on reserve data would be diluted
7 with a lot of other observations given the higher
8 average values. If you were going to follow my
9 general approach, you'd probably want to increase
10 these allowances for the electric space heat by 20 or
11 25 percent for the on reservation usage.

12 MR. SENWUNG LUK: Thank you, Mr.
13 Chernick, that's very helpful. If I could take you to
14 AMC/GAC Number 2, which is actually labelled as
15 AMC/GAC Number 1, it's somewhat confusing. Oh, yes,
16 that's correct. So in this question the Assembly of
17 Manitoba Chiefs had posed an Information Request to
18 the Green Action Centre about exactly how to design or
19 how to account for the electric space heat usage
20 patterns on reserve.

21 And because we -- I'm sorry. Let me
22 say that again. So we -- we posed the question
23 relating to electric heat patterns -- consumption
24 patterns on reserve. And I believe for question
25 number B your answer, Mr. Chernick, was that you don't

1 have the seasonal usage data for on reserve customers.

2 Could I ask what exactly is the kind of
3 data that you would need in order to arrive at the
4 kind of calculation that you did for off reserve
5 customers?

6 MR. PAUL CHERNICK: Well, either
7 monthly consumption or monthly billing data from on
8 reserve customers.

9 MR. SENWUNG LUK: If that data were
10 provided to you, would you be able to arrive at the
11 blocks for on reserve customers?

12 MR. PAUL CHERNICK: Yes, I could do
13 that.

14 MR. SENWUNG LUK: If I could ask My
15 Friend Ms. Fernandes, is -- is that data something
16 that Hydro would be able to provide to the hearing?
17

18 (BRIEF PAUSE)

19
20 MS. ODETTE FERNANDES: Sorry, that's
21 something we would have to look into. But I think at
22 this point our panel has already stepped down, and
23 that information should have been requested at the
24 time our panel was present.

25 THE REPORTER: Is there an

1 undertaking?

2 THE CHAIRPERSON: No.

3 MR. SENWUNG LUK: Perhaps I could
4 discuss further with Ms. Fernan -- Fernandes during
5 the break --

6 THE CHAIRPERSON: Well, I would
7 suggest that you may want to talk separately.

8 MR. SENWUNG LUK: Okay.

9 THE CHAIRPERSON: I mean, Ms.
10 Fernandes is right. I mean, that information could
11 have been solicited or requested in cross-examination
12 at the time that that panel was sitting. But perhaps
13 some sort of accommodation can be arrived at.

14

15 CONTINUED BY MR. SENWUNG LUK:

16 MR. SENWUNG LUK: Maybe I could ask
17 for a conditional undertaking for Mr. Chernick. If --
18 if that data were available would -- would he be able
19 to generate the same calculations for a different set
20 of electric space heating blocks for on reserve
21 customers?

22 MR. WILLIAM GANGE: Mr. Chair, I'm
23 prepared to enter into discussions with counsel, but
24 I'm not prepared to give a conditional undertaking.
25 And I don't -- I -- I've never heard of one (1).

1 THE CHAIRPERSON: Well, I -- I was
2 going to say I don't know what a conditional
3 undertaking is.

4 MR. WILLIAM GANGE: Me neither.

5 THE CHAIRPERSON: So I -- I think
6 counsel should get together over the lunch hour and
7 see what -- what can be arrived at. And I -- I
8 suspect that Mr. Chernick has already indicated that
9 if he had the material he -- he would prepare
10 something, but I don't think he can give an
11 undertaking when he doesn't have the material.

12 MR. SENWUNG LUK: Okay. Thank you,
13 Mr. Chair.

14

15 CONTINUED BY MR. SENWUNG LUK:

16 MR. SENWUNG LUK: Okay. I'd like to
17 move on to the question of the administration of these
18 rates and how eligibility should be determined for
19 them. If I could ask Ms. Shubert to pull up the
20 PUB/GAC Number 1.

21 So with respect to the -- the LICO-125
22 portions of the rates that you are proposing, I
23 understand that what -- what you're proposing in terms
24 of eligibility is -- is set out in -- in this
25 Information Request. And what I understand and I'm

1 asking -- I'm going to ask you to confirm my
2 understanding is that the eligibility for the LICO-125
3 rates would be the same as the eligibility process for
4 the Affordable Energy Program. So you say at a
5 response number A:

6 "For those customers over already
7 qualified for the AEP, eligibility
8 for the LICO rate should be
9 automatic. For other customers,
10 Manitoba Hydro can follow the
11 practice that it currently follows
12 for the AEP."

13 That's confirmed?

14 MR. PAUL CHERNICK: Yes.

15 MR. SENWUNG LUK: Thank you. Ms.
16 Shubert, if I could ask you to pull up PUB/MH Round 1,
17 Number 126 (b) through (e), page 2. And this -- this
18 is the Information Request at which Manitoba Hydro
19 discusses how eligibility is determined for the
20 Affordable Energy Program. And at subparagraph (1),
21 what Manitoba Hydro says is that:

22 "Customers are asked to provide
23 copies of their income tax return
24 and note -- notice of assessment as
25 proof of income."

1 So when you -- Mr. Chernick, when you
2 proposed using the eligibility criteria for the AEP,
3 I'm sorry, the Affordable Energy Program , to also
4 determine eligibility for the LICO-125 rate, were you
5 aware that the applicant is required to provide an
6 income tax return and notice of assessment in order to
7 qualify?

8 MR. PAUL CHERNICK: I -- I believe
9 that there are other ways of qualifying as well as the
10 -- as the answer says. But this was my general
11 understanding that they had to provide information
12 along those lines.

13 MR. SENWUNG LUK: Would it surprise
14 you if I were to put it to you that the income of a
15 status Indian living on reserve is general --
16 generally not liable to income tax in Canada?

17 MR. PAUL CHERNICK: That certainly
18 seems plausible.

19 MR. SENWUNG LUK: Would you agree that
20 it's a reasonable inference that customers who live on
21 reserve are much less likely to file an income tax
22 return?

23 MR. PAUL CHERNICK: That certainly
24 make sense.

25 MR. SENWUNG LUK: Now, if a customer

1 doesn't apply for the LICO-125 rate then they would be
2 treated as a non-LICO customer according to your
3 proposal.

4 Is that -- is that correct?

5 MR. PAUL CHERNICK: Yes.

6 MR. SENWUNG LUK: And your proposal is
7 for the person who doesn't qualify as LICO-125 to be
8 paying a bit more in their rates to finance the
9 subsidy for the customers that -- that are low income.

10 Is that right?

11 MR. PAUL CHERNICK: That's correct.

12 MR. SENWUNG LUK: Now, is it fair to
13 say that if having a tax return and a notice of
14 assessment is required to qualify for the Affordable
15 Energy Program and, therefore, also for the low income
16 rate that a person who doesn't have a tax return
17 wouldn't be eligible for the low income rate, and
18 therefore, would also be called upon to pay a
19 surcharge on their rates to finance the subsidy for
20 those who have been able to qualify?

21 MR. PAUL CHERNICK: Well, the -- the
22 response that we're looking at notes that there are
23 other ways of qualifying. But you're correct that if
24 -- if the program is set up so that some low income
25 customers, especially those with the lowest incomes,

1 can't qualify that would be a problem. You want to
2 have a system in which all the eligible customers can
3 qualify and all of them will be qualified if it's even
4 worth their effort to make a phone call, basically,
5 and -- and get the process started.

6 MR. SENWUNG LUK: Ms. Shubert, if I
7 could ask you to scroll down to the next page.

8 Mr. Chernick, were you aware that there
9 is a parallel program to the Affordable Energy Program
10 for residents on reserve, known as the Indigenous
11 Power Smart Program?

12 MR. PAUL CHERNICK: I -- I was not. I
13 mean, now that I'm looking at this line I think -- I -
14 - I should, Gee, that looks kind of familiar. But if
15 I -- I believe I'd seen a reference to it, but I was
16 not thinking about it when I was describing the
17 qualifications.

18 MR. SENWUNG LUK: I'll put it to you -
19 - and this -- this is in -- in this -- this is in the
20 record elsewhere and I think in this Information
21 Request as well, that for the Indigenous Power Smart
22 Program there is no income qualification for it, and
23 that there is no application process that requires
24 individuals to apply to -- to qualify for the benefits
25 of the Indigenous Power Smart Program.

1 MR. PAUL CHERNICK: That's what this
2 responses says, yes.

3 MR. SENWUNG LUK: Would you endorse a
4 proposal by which any resident on reserve would also
5 ipso facto qualify for the LICO-125 portions of the
6 rate that you have proposed?

7 MR. PAUL CHERNICK: I don't have
8 enough information to answer that question. If, in
9 fact, the vast majority of the home -- of the
10 households on First Nation reserves would qualify if
11 they had the necessary paperwork, then my answer would
12 be yes. That's -- it -- it's certainly
13 administratively simpler to simply bring everybody
14 into the program rather than trying to sort out in a
15 one (1) or two (2) people per reservation who are
16 doing just fine and don't need the assistance.

17 If on the other hand you have
18 reservations with a significant number of -- of
19 customers who would not meet the LICO-125 or even be
20 close, then I -- I would be more reluctant to go in
21 that direction. This is a classical type 1/type 2
22 error. You either set your -- your standards to
23 loosely include people that you don't intend to
24 include, or you set it too narrowly and exclude people
25 you wish you had included.

1 And I don't have enough information to
2 say whether just including everybody on the reserves
3 has very little of that over-inclusive nature. I
4 suspect that's the case, but, again, I don't know.
5 There are certainly -- in the -- in the US there are
6 native reserves where that would be a very good
7 assumption. And there are others where it wouldn't
8 be, largely depending upon who has a casino.

9 MR. SENWUNG LUK: Okay. Mr. Chernick,
10 that concludes the -- the questions that the Assembly
11 of Manitoba Chiefs had for you. I appreciate your
12 taking the time to answer our questions. And thank
13 you, Mr. Chair.

14 THE CHAIRPERSON: Thank you, Mr. Luk.
15 If counsel could get together over lunch and see if we
16 can have a resolution of this. We're -- we're going
17 to break for lunch until one o'clock. Thank you.

18

19 --- Upon recessing at 11:53 a.m.

20 --- Upon resuming at 1:01 p.m.

21

22 THE CHAIRPERSON: So I guess the
23 question is: Are we dealing with the -- with Mr. --
24 sorry, I was looking for Mr. Luk -- for Mr. Luk's
25 issue. I'm just wondering if counsel had an

1 opportunity to discuss it over lunch.

2 MR. SENWUNG LUK: Thank you, Mr.
3 Chair. Counsel did, indeed, have this opportunity
4 and, sorry, I was hiding in -- in the back whole. I
5 had given my place to Mr. Williams -- Dr. Williams,
6 I'm sorry.

7 So, counsel did have a chance to
8 discuss and I'm pleased to advise that Hydro
9 identified one (1) of the answers to the IRs, being,
10 AMC-CMH round 2, question 1 as responsive to the kind
11 of data that Mr. Chernick would need to perform the
12 calculation that we spoke of.

13 And from discussion with Mr. Gange and
14 Mr. Chernick, I believe that counsel are -- or
15 everyone is agreeable that this data is sufficient and
16 I will ask the undertaking -- I believe My Friends
17 will confirm that they're willing to accept the
18 undertaking that this -- to use this data to calculate
19 a block for electric space heating for on-reserve
20 customers.

21 THE CHAIRPERSON: Mr. Gange...?

22 MR. WILLIAM GANGE: Yes. Mr. Chair,
23 thank you. And Mr. Luk has -- has appropriately
24 described the undertaking and Mr. Chernick will review
25 the material and attempt to respond with a block rate

1 design pursuant to the -- the information that's
2 provided.

3 THE CHAIRPERSON: Thank you. Can I
4 just ask the court reporter if you have the
5 undertaking? Thank you.

6

7 --- UNDERTAKING NO. 39: For Mr. Chernick to use
8 AMC-CMH round 2, question
9 1 data to calculate a
10 block for electric space
11 heating for on-reserve
12 customers.

13

14 THE CHAIRPERSON: I appreciate counsel
15 resolving this matter. Dr. Williams...?

16

17 CROSS-EXAMINATION BY DR. BYRON WILLIAMS:

18 DR. BYRON WILLIAMS: Yes, good
19 afternoon, members of the panel and Mr. Chernick and
20 Green Action Centre team. I'll just indicate that Ms.
21 DeSorcy will be -- of the Consumers Association,
22 Manitoba branch will be joining us a bit later this
23 afternoon.

24 And perhaps we can start to turning to
25 Mr. Chernick's evidence, page 38, table 6. Mr.

1 Chernick, this is a summary of your rate proposals as
2 they appeared in your evidence, sir?

3 MR. PAUL CHERNICK: That's correct.

4 DR. BYRON WILLIAMS: It's been tweaked
5 slightly, which we'll come to, and -- and recognizing
6 that others have travelled upon this ground, I just
7 want to just look at the rate proposals focusing first
8 on the basic charge first block and remainder and
9 leaving the kilowatt hour that are set out below and
10 the recovery rate to a bit later, sir.

11 Is not fine with you?

12 MR. PAUL CHERNICK: That's fine.

13 DR. BYRON WILLIAMS: And just in terms
14 of basic charge, you'll see, sir, that you propose a
15 zero basic charge both for LICO-125 all, as well as
16 the electric standing heating.

17 Is that right, sir? Zero basic charge
18 for -- for both LICO categories.

19 MR. PAUL CHERNICK: Yes.

20 DR. BYRON WILLIAMS: And -- and then
21 for the non-LICO residential non-low income cutoff
22 residential a basic charge of 7 -- \$7.82, sir?

23 MR. PAUL CHERNICK: Yes.

24 DR. BYRON WILLIAMS: And again for
25 non-LICO non-low income cutoff, but for the heating

1 class -- the heating category 8 -- \$8.44, sir?

2 MR. PAUL CHERNICK: Yes.

3 DR. BYRON WILLIAMS: In essence, for
4 the residential group there will be three (3)
5 different basic charges?

6 MR. PAUL CHERNICK: Well, if the Board
7 adopts all three (3) of my ideas then it would
8 probably want to use the same basic charge for all
9 non-LICO customers and leave that at seven eighty-two
10 and determine -- have Manitoba Hydro determine the --
11 the space heating energy blocks accordingly.

12 DR. BYRON WILLIAMS: So just so I
13 understand, sir, if -- if it -- if the Board walks
14 down this path, ultimately, you might be looking at
15 two (2) different basic charges as opposed to three
16 (3). Is that what you're saying, sir?

17 MR. PAUL CHERNICK: Yes, that's what I
18 was envisioning.

19 DR. BYRON WILLIAMS: And -- and to the
20 extent that the basic charge for non-LICO -- non-low
21 income cutoff electrical heating is reduced, you're
22 suggesting that that might be made up in the
23 difference between the first block and the remainder?

24 MR. PAUL CHERNICK: Actually, I was
25 proposing a \$.04 cent discount for the first block so

1 that both the first block and the second block would
2 go up a little bit to recover the difference.

3 DR. BYRON WILLIAMS: I understand your
4 point. And just looking at the first block for a
5 minute, sir, for three (3) of the columns being the --
6 the LICO -- low income cutoff 125, the non-LICO
7 standard heating, and the LICO-125 standard heating,
8 you provo -- propose the same first block in
9 remainder; agreed?

10 MR. PAUL CHERNICK: Yes.

11 DR. BYRON WILLIAMS: And then a
12 separate one for the non-LICO residential; agreed?

13 MR. PAUL CHERNICK: Yes.

14 DR. BYRON WILLIAMS: So in essence,
15 two (2) different rate blocks for the residential
16 class, sir?

17 MR. PAUL CHERNICK: Well, there'd be--

18 DR. BYRON WILLIAMS: Two (2) different
19 --

20 MR. PAUL CHERNICK: You'd need two (2)
21 different sets of rates, each of which is -- has two
22 (2) blocks.

23 DR. BYRON WILLIAMS: Fair enough. And
24 sir, when we go to the -- in terms of the composition
25 of the first block, non-low income cutoff residential

1 stays constant at 500 kilowatt hours, sir; agreed?

2 MR. PAUL CHERNICK: Yes.

3 DR. BYRON WILLIAMS: And likewise in
4 summer, spring, fall and winter the low income cutoff
5 125 remains constant as well; correct?

6 MR. PAUL CHERNICK: Yes.

7 DR. BYRON WILLIAMS: And then what you
8 have for the non-low income cutoff heating group is
9 that they would pay the remainder. In the summer
10 there is no first block; is that right, sir?

11 MR. PAUL CHERNICK: Yes.

12 DR. BYRON WILLIAMS: So for their --
13 their needs in the summer they would pay all at the
14 8.556 cents?

15 MR. PAUL CHERNICK: Yes.

16 DR. BYRON WILLIAMS: And then they
17 would have different levels that are protected with a
18 protected first block in the spring, fall and winter;
19 correct?

20 MR. PAUL CHERNICK: Yes.

21 DR. BYRON WILLIAMS: Now, Mr.
22 Chernick, it would be your understanding that Manitoba
23 Hydro does not have -- does not capture income levels
24 in its billing records; would that be fair, sir?

25 MR. PAUL CHERNICK: I think that's

1 correct.

2 DR. BYRON WILLIAMS: So to -- as you
3 discussed to a little degree with My Friend from the
4 Assembly of Manitoba Chiefs to the -- to the extent
5 that the households were -- were found eligible for
6 the discounted first block and discounted basic
7 charge, they would have to register with Manitoba
8 Hydro and be means tested, sir?

9 MR. PAUL CHERNICK: They would surely
10 have to be registered, to use your term, with Manitoba
11 Hydro whether the means testing is part of that
12 process or it's already been done for some other
13 governmental program or, for that matter, for another
14 Manitoba Hydro program the means test has to occur
15 someplace, yes.

16 DR. BYRON WILLIAMS: And, sir, do you
17 mind instead of using LICO, if we just use low income
18 as a shorthand for that, sir? Is that satisfactory
19 for you?

20 MR. PAUL CHERNICK: Oh sure.

21 DR. BYRON WILLIAMS: And if a low
22 income household does not enroll, they will
23 essentially pay the non-low income rate; is that
24 correct, sir?

25 MR. PAUL CHERNICK: That's correct.

1 DR. BYRON WILLIAMS: Now, sir, at the
2 -- the bottom of this table 6 from your pre-filed
3 evidence, you present the recovery rates as you
4 calculated them at the -- as of October 31st, 2017;
5 agreed?

6 MR. PAUL CHERNICK: Yes.

7 DR. BYRON WILLIAMS: And those are
8 based upon a recovery not only from the residential
9 class, sir, but also from the -- the general service
10 class with the exception of the surplus energy
11 program; agreed?

12 MR. PAUL CHERNICK: I believe that's
13 correct. I correct those numbers in my presentation -
14 -

15 DR. BYRON WILLIAMS: Yeah, we're --
16 we're going to come. Yeah, we'll come to your
17 attachment to PUB-1-14 in a second, sir.

18 But, in essence, sir, what you're -- if
19 we look at the recovery rate that's presented here,
20 we're assuming it would be spread across the general
21 service class, the non-low income cutoff residential
22 class, and the low income cutoff residential
23 ratepayers who do not enroll in the program; agreed?

24 MR. PAUL CHERNICK: That's correct.

25 DR. BYRON WILLIAMS: And the rates we

1 see presented here again, sir, these were assuming
2 Hydro got a 7.9 percent rate increase in August of
3 2017 as opposed to a 3.36 percent rate increase, sir/

4 MR. PAUL CHERNICK: Yes, this was for
5 the -- the proposed increase.

6 DR. BYRON WILLIAMS: And they're also
7 presented and calculated on the assumption that the
8 recovery would spread across, not just the residential
9 class, but across general service as well; correct?

10 MR. PAUL CHERNICK: That's correct.

11 DR. BYRON WILLIAMS: And perhaps if we
12 can pull up attachment PUB-1-14, the summary page.

13 And, sir, you mentioned that you had
14 recalculated the estimates and -- and what we see
15 towards the bottom of the first page of PUB-GAC
16 attachment 14 is the suggestion when we look at the
17 9.0 -- zero zero -- let me try that again.

18 The non-low income cutoff residential,
19 the NLR line under LICO-125 All, what you're
20 suggesting there, sir, is that if the transfer to low
21 income -- eligible and registered low income
22 ratepayers would spread only across the residential
23 class, it would mean a -- a rate increase of about a
24 cent a kilowatt hour for the resident -- for other
25 residential class?

1 MR. PAUL CHERNICK: Yes.

2 DR. BYRON WILLIAMS: And it was spread
3 across all -- all non-low income residential as well
4 as general service, it would be about .24 of a cent
5 per kilowatt --

6 MR. PAUL CHERNICK: Right, about a
7 quarter of a cent, right.

8 DR. BYRON WILLIAMS: And sir, if we go
9 to the -- the next column, what we're seeing there is
10 if that we -- if we spread the -- the transfer to
11 electric standard heating among the -- simply among
12 the nonqualifying residential ratepayers, it would be
13 about 4/10s of a cent?

14 MR. PAUL CHERNICK: Yes.

15 DR. BYRON WILLIAMS: And so in total,
16 sir, if -- if the transfer -- recovery of the
17 transfers is restricted to the residential class, you
18 calculate it would be about 1.4 cents per kilowatt
19 hour, sir?

20 MR. PAUL CHERNICK: Yes.

21 DR. BYRON WILLIAMS: If we can go to
22 the next page of this information response. Yes.
23 And, sir, what we see -- that's perfect there,
24 Kristen.

25 What we see towards the bottom of this

1 table is your calculation of the trans -- of the cost
2 of providing the support to low income customers. And
3 if one combined the 12.8 million calculated for
4 residential share and the 37.4 million for
5 nonresidential share, that transfer in one (1) year
6 would be about \$50 million, sir?

7 MR. PAUL CHERNICK: Yes.

8 DR. BYRON WILLIAMS: And if we go to
9 the ESH, the next page. This, sir, presents a
10 calculation of the transfer in support of electric
11 heating; agreed?

12 MR. PAUL CHERNICK: Yes.

13 DR. BYRON WILLIAMS: And what we see,
14 sir, is if you combine the 4.5 million kicked in by
15 other residential ratepayers and the 14.7 million
16 provided by general -- general service, you'd have
17 about 19 -- a bit north of \$19 million, sir?

18 MR. PAUL CHERNICK: Yes.

19 DR. BYRON WILLIAMS: And that would be
20 an annual transfer, sir?

21 MR. PAUL CHERNICK: Yes, this is --
22 for annual cost.

23 DR. BYRON WILLIAMS: Okay. Now if we
24 could go to the response --

25 MR. PAUL CHERNICK: Excuse me, you can

1 see the same thing higher up on route 20, I have the
2 \$19.2 million revenue reduction for that group. So --

3 DR. BYRON WILLIAMS: Thank you.

4 MR. PAUL CHERNICK: -- the numbers are
5 actually tying together. I was -- I was concerned
6 that I had lost something along the way but I think
7 it's all there.

8 DR. BYRON WILLIAMS: I'm glad that my
9 math corresponds with yours, Mr. Chernick. If we can
10 go to PUB-Green Action Centre 4(d), the attachment.

11 Mr. Chernick, subject to check, what --
12 what's been done in the response to PUB-Green Action
13 Centre 4(d), it's assumed that the recovery of the --
14 of -- of the support for -- for low income customers,
15 as well as for electric heat customers is borne
16 entirely by the residential class; agreed, sir?

17 MR. PAUL CHERNICK: Yes.

18 DR. BYRON WILLIAMS: And as compared
19 to table 6, which we saw before, which -- which
20 provided a first block of 7.93 and a second block of
21 8.92 or so, what this tells us is that the second
22 block for non-low income cutoff residential would be
23 over \$0.10 per kilowatt hour, sir?

24 MR. PAUL CHERNICK: Yes.

25 DR. BYRON WILLIAMS: And to the

1 extent, sir, that there were low income persons who
2 did not enroll in the low income cutoff support, they
3 would be paying, for that remainder block, 10.3 cents
4 in this circumstances, sir, per kilowatt hour?

5 MR. PAUL CHERNICK: Well, if you don't
6 believe that the vast majority of eligible low income
7 and space heating customers would participate, then
8 the matter would be smaller and rather than 10.3 it
9 would be something less than that.

10 But if you had just a few electric
11 space heating customers who didn't qualify for one
12 reason or another, then yes, they'd be paying those
13 rates.

14 DR. BYRON WILLIAMS: And sir, if you
15 were rolling out this program effective April 1st,
16 2018 using these numbers, then it's -- it's quite
17 possible that for that -- for a certain period of time
18 at least there'd be a considerable number of low
19 income ratepayers paying this -- this higher -- higher
20 block at 10.3 cents?

21 MR. PAUL CHERNICK: Well then you'd --
22 you wouldn't want to set the rates that way. If you
23 are going to implement it as of April 1st and there
24 isn't going to be a lot of time for information and
25 recruitment of -- of customers into the program, then

1 you would assume a much lower participation in that
2 first year and hence, a much lower matter.

3 DR. BYRON WILLIAMS: Sir, if we can
4 turn now to the non-LICO electric heating, and, sir,
5 what this tells us is if the entire cost of the -- of
6 the transfer to -- related to electric heat as well as
7 low income was borne by the residential class, for the
8 non-low income electric heating customer their second
9 block rate would be almost \$0.10 a kilowatt hour?

10 MR. PAUL CHERNICK: Yes, again,
11 assuming full participation.

12 DR. BYRON WILLIAMS: And sir, if we --
13 if we look above the figures presenting the -- the
14 first block and the remainder, you'll see estimates of
15 what a non-low income standard heating customer would
16 pay at various consumption levels ranging from 250
17 kilowatt hours to 5000 kilowatt hours.

18 Do you see that, sir?

19 MR. PAUL CHERNICK: Yes.

20 DR. BYRON WILLIAMS: And what this
21 tells us is that in the spring upon your -- your rate
22 design proposal and again, assuming that the transfers
23 were borne entirely by the residential class,
24 consumers at the 750 kilowatt hour level, the 1000,
25 2000 and 5000 kilowatt hour level would be paying more

1 under this proposal.

2 Is that fair, sir?

3 MR. PAUL CHERNICK: Yes, because
4 they'd be paying the cost of -- of reducing the rates
5 to the low income customers.

6 DR. BYRON WILLIAMS: And if you look
7 at -- at the 2000 kilowatt hour, for example, sir,
8 those consumers would be paying somewhere between 19
9 and \$20 more a month; is that correct?

10 MR. PAUL CHERNICK: Yes.

11 DR. BYRON WILLIAMS: And if we go down
12 to the fall, if we could, we see the results for there
13 as well, sir. And scroll down to the winter. Again,
14 you see the -- in the winter the -- at - at 2000
15 kilowatt hours a month it's --it's roughly a
16 breakeven, sir?

17 MR. PAUL CHERNICK: Yes.

18 DR. BYRON WILLIAMS: And anything
19 above that that consumer would be worse off under your
20 proposal?

21 MR. PAUL CHERNICK: Well, they'd be
22 better off because of the electric space heating
23 proposal, but they'd be worse off because they'd be
24 helping to support the low income customers.

25 DR. BYRON WILLIAMS: And if we --

1 MR. PAUL CHERNICK: And again, this is
2 -- this assumes that the costs are kept within the
3 residential class which -- especially for low income
4 does not seem to me to be warranted.

5 DR. BYRON WILLIAMS: And if we can go
6 down to summer for a second which hopefully is at the
7 bottom -- oh, up to summer.

8 Under your proposal, the non-low income
9 electric space heating would be paying more whether at
10 250 kilowatt hours or -- or 5000, sir, is that fair?

11 MR. PAUL CHERNICK: That's correct.

12 DR. BYRON WILLIAMS: And sir, just so
13 our client understand your position, would you still
14 recommend this rate design if the costs were to be
15 borne entirely by the residential class?

16 MR. PAUL CHERNICK: Well, in -- in
17 that case, I think the -- the Board might want to look
18 at some phase-in instead of starting with a \$.04 cent
19 discount. Perhaps starting with \$.02 cent discount
20 because the effects on the larger non-low income
21 customers, in particular, would be higher.

22 DR. BYRON WILLIAMS: Okay. Just to
23 make sure our client understands your proposal, let's
24 take April 1st, 2018 and let's assume our client's
25 advice is not accepted and Hydro gets a 7.9 percent

1 rate increase. And let's assume as well that your
2 rate design proposals are accepted.

3 Would it be fair to say that all
4 general service customers would then get a rate
5 increase above 7.9 percent, sir?

6 MR. PAUL CHERNICK: Yes.

7 DR. BYRON WILLIAMS: And --

8 MR. PAUL CHERNICK: Although, again,
9 if -- I don't know when you think the Order is going
10 to come out in this case, but if we're talking about
11 rate starting April then for the low income customers,
12 you're not going to have a chance to register very
13 many of them, and only a small part of that cost
14 should be in this calculation.

15 If you're talking about the rates to be
16 set in September or next spring, that's another
17 matter. You'd have more customers coming in.

18 DR. BYRON WILLIAMS: Okay.

19 MR. PAUL CHERNICK: I just want to
20 keep that in perspective.

21 DR. BYRON WILLIAMS: Fair enough.

22 MR. PAUL CHERNICK: But, yes, whatever
23 costs are being transferred off of the space heating
24 and low-income customers on to -- into the nonresident
25 class would be increasing their percentage increase.

1 DR. BYRON WILLIAMS: And, in effect,
2 in -- in the hypothetical I put to above 8 percent?

3 MR. PAUL CHERNICK: Yes.

4 DR. BYRON WILLIAMS: And similarly,
5 sir, under that same scenario for all residential
6 standard, i.e., nonelectric and non-low income, their
7 rate increases would -- would also be above 8 percent,
8 sir, under the same scenario?

9 MR. PAUL CHERNICK: The average
10 customer, yes.

11 DR. BYRON WILLIAMS: If we can go to
12 your evidence, page 34, lines 7 to 10 and you did have
13 a bit of a discussion about this with Board Member
14 Kapitany this morning.

15 What we see here is your suggestion
16 that if absolutely necessary Hydro could propose, and
17 the Board could approve a limit on the number of
18 eligible customers allowed on to the -- the low income
19 discount each year.

20 Do you see that reference, sir?

21 MR. PAUL CHERNICK: Yes.

22 DR. BYRON WILLIAMS: And again, sir,
23 the practical effect of this would be, again, assuming
24 a 7.9 percent rate increase. If enrolment was
25 limited, those who wish to enroll but who were beyond

1 the enrolment cap would face rate increases over and
2 above 7.9 percent?

3

4 (BRIEF PAUSE)

5

6 DR. BYRON WILLIAMS: You're talking
7 about capping the number in each year.

8 MR. PAUL CHERNICK: Yes.

9 DR. BYRON WILLIAMS: And what I'm
10 suggesting to you, sir, is that someone enrolled but
11 were -- were too late in the queue, they would be --
12 be facing -- assuming Hydro got a 7.9 percent rate
13 increase, a rate increase in excess of 8 percent?

14 MR. PAUL CHERNICK: You could
15 structure it that way. You could also have a -- an
16 interim rate that gave the 7.9 percent increase to
17 customers on the waiting list. It didn't give them
18 the -- the discount in the -- in the early blocks to -
19 - to moderate the effect in the short term so that
20 they don't have their bills going up and then down the
21 next year when they get on to the low-income rate.

22 And, as I note, this is the sort of
23 thing that one would do only as an absolute last
24 resort if it were really necessary.

25 DR. BYRON WILLIAMS: Mr. Chernick, do

1 you see your rate design proposals coming in at the
2 same time as Manitoba Hydro gets its next approved
3 rate increase, assuming they -- there is a -- a next -
4 - assume there is a -- an another rate increase?

5 MR. PAUL CHERNICK: I didn't really
6 concern myself with the details of the timing. I
7 assumed that it would be at a time when rates were
8 going to be adjusted anyway, given that there will be
9 a number of those events over the next several years,
10 but I don't have a strong commitment to -- and as we
11 were talking about doing it in April versus September,
12 that's not really a -- an issue I've struggled with.

13 DR. BYRON WILLIAMS: You'll agree,
14 sir, that to the extent -- let's take the April 1st
15 timeline. If this was brought in at the same time as
16 an April 1st rate, there would be very little time to
17 enrol vulnerable ratepayers in that?

18 MR. PAUL CHERNICK: Yes, I've -- I've
19 noted that, and -- and therefore, the -- the
20 participation rate would be low. The adder should --
21 should be low, and that's -- that would be a reason to
22 not do it in April, but to do it in September, for
23 example.

24 DR. BYRON WILLIAMS: And -- and by not
25 doing it, sir, are you talking about the rate design?

1 MR. PAUL CHERNICK: The rate design,
2 yes.

3 DR. BYRON WILLIAMS: I understand,
4 sir, that in preparing your evidence, you were not in
5 the position to directly and systemically engage with
6 Manitoba consumers. Would that be fair?

7 MR. PAUL CHERNICK: That's correct.

8 DR. BYRON WILLIAMS: And to your
9 knowledge, sir, did your clients undertake any
10 consumer engagement with Manitoba consumers which was
11 shared with you prior to the filing of your evidence?

12 MR. PAUL CHERNICK: I think you would
13 have to ask them that.

14 DR. BYRON WILLIAMS: Sir, did you
15 review the transcript from the Coalition's consumer
16 panel on -- last Friday?

17 MR. PAUL CHERNICK: I have not.

18 DR. BYRON WILLIAMS: Sir, would it be
19 fair to say that there was no consumer engagement
20 conducted in the preparation of your prefiled direct
21 testimony?

22 MR. PAUL CHERNICK: I -- I did not
23 have focus groups or anything, if that's what you're
24 asking.

25 DR. BYRON WILLIAMS: Okay. Sir, and -

1 - and in preparing your evidence, did you have the
2 opportunity or occasion to review the Manitoba
3 Assistance Act relating to the provision of income
4 assistance to Manitobans?

5 MR. PAUL CHERNICK: I haven't reviewed
6 it in this proceeding. It sounds like something that
7 I looked at a couple of rate cases ago, but I -- I
8 don't remember it in any detail.

9 DR. BYRON WILLIAMS: And it would be
10 fair to say, sir, that you would not have reviewed, in
11 preparation of your evidence for this hearing,
12 Manitoba Assistance Regulation 404/88?

13 MR. PAUL CHERNICK: That's a fair
14 assumption.

15 DR. BYRON WILLIAMS: And would it also
16 be fair to say, sir, that that in preparing your
17 evidence, you would not have reviewed the Canadian
18 Centre for Policy Alternatives report dated December,
19 2009, titled 'It Takes All Day to Be Poor'? That's
20 not a report you're familiar with, sir?

21 MR. PAUL CHERNICK: No, I don't think
22 I've seen that.

23 DR. BYRON WILLIAMS: Are you generally
24 familiar with the phrase, sir, that it takes all day
25 to be poor?

1 MR. PAUL CHERNICK: I've heard it
2 stated in somewhat different ways, but I understand
3 that concept. It's certainly an argument for making
4 enrolment in low income programs as easy as possible
5 and providing the resources to -- to get -- bring
6 people into the program with minimal effort on their
7 part.

8 DR. BYRON WILLIAMS: I appreciate
9 that, sir. I -- I wonder if we can turn to Green
10 Action Centre's response to PUB Information Request
11 number 1, which my friend from the Assembly of
12 Manitoba Chiefs did discuss with you briefly this
13 morning, Mr. Chernick.

14 In essence, sir, this -- this
15 Information Request sought insight into whether you --
16 if you had recommendations with regard to successful
17 practices in other jurisdictions relating to enhancing
18 participation in -- in programs like this. Would that
19 be fair? That's what the question was?

20

21 (BRIEF PAUSE)

22

23 DR. BYRON WILLIAMS: Let -- let me try
24 this another way, sir.

25 MR. PAUL CHERNICK: Thank you.

1 DR. BYRON WILLIAMS: You did not
2 conduct a survey of other jurisdictions in terms of
3 what practices they had engaged in in terms of
4 increasing enrolment, agreed?

5 MR. PAUL CHERNICK: You're -- yes,
6 that's correct.

7 DR. BYRON WILLIAMS: And what we see
8 here, sir, in your response, and focusing you on the
9 second paragraph, is a suggestion that Manitoba Hydro
10 might be able to place reliance upon the Employment
11 and Income Assistance Program in assisting to certify
12 eligibility. Would that be fair?

13 MR. PAUL CHERNICK: Yes, that may be
14 possible.

15 DR. BYRON WILLIAMS: And sir, are you
16 aware whether or not Employment and Income Assistance
17 provides income support to welfare recipients to pay
18 their bills, either through direct payment or through
19 a monthly budget allotment?

20 MR. PAUL CHERNICK: I don't know
21 exactly what their programs consist of.

22 DR. BYRON WILLIAMS: Okay. Well, sir,
23 let -- let us assume for a moment, if you will, that
24 to the -- that -- that welfare provides some -- or
25 EIA, Employment and Income Assistance, provides some

1 income support to recipients to pay their bills.

2 Just to be clear, in terms of your
3 proposal, are you suggesting that consumers who
4 already receive government assistance from a different
5 source to pay their utility bills should receive this
6 four cents (\$0.04) a kilowatt hour discount?

7 MR. PAUL CHERNICK: I guess that would
8 depend on the details of the -- of the assistance, so
9 I'm not really concerned that we're going to wind up
10 with -- with the situation of helping low-income
11 customers too much through this program, but in terms
12 of whether it's -- whether there are better things to
13 do with the funds, given the existing assistance
14 programs, I just don't know enough about those other
15 assistance programs to answer.

16 DR. BYRON WILLIAMS: Well -- well, let
17 us assume for a moment, sir, that there's a number of
18 cons -- consumers who have their utility bills
19 directly paid by Manitoba Hydro by Employment and
20 Income Assistance. Just so I understand your policy
21 position, sir, are you recommending -- in that
22 scenario, are you recommending that Manitoba Hydro
23 rate pay -- payers replace the Government of Manitoba
24 taxpayers in paying that support for utility payments?

25 MR. PAUL CHERNICK: You know, I really

1 have not thought about that issue. You're -- you've
2 suggested that the EIA program provides this kind of
3 support. I don't know how fungible that support is,
4 whether the dollars we just go to the same customer --
5 as the same household for a different kind of support
6 if the utility bill were smaller, or whether it would
7 go to another needy household, so I -- I can't really
8 answer that question in detail.

9 DR. BYRON WILLIAMS: So I'm not
10 looking for detail, I'm looking for philosophy, sir.
11 From a philosophical perspective, are you recommending
12 that Hydro ratepayers replace government taxpayers to
13 the extent, if any, that utility bills are paid
14 through -- through income assistance programs? I just
15 want to understand your philosophy, sir.

16 MR. PAUL CHERNICK: Okay. If you --
17 if you -- you've defined it as ratepayers or
18 taxpayers, and in -- in general, I think I would have
19 a preference for taxpayers providing these benefits,
20 because that -- taxes are generally collected on an
21 ability to pay basis a little bit more than -- than
22 the -- than Utility revenues. But again, the --
23 there's a lot of details involved.

24 DR. BYRON WILLIAMS: I understand
25 that. I -- I appreciate your consideration in walking

1 down this path with me, sir.

2

3

(BRIEF PAUSE)

4

5 DR. BYRON WILLIAMS: Again, realizing
6 that you haven't explored this factually, to the
7 extent that income assistance -- sorry, let me try
8 this again.

9 Given your -- your response, sir, does
10 this -- if we're aiming at a marketplace that is --
11 is, in terms of low income consumers who are
12 vulnerable to Hydro rate increases, which are -- are
13 more the working poor, does this possess or does --
14 does this present particular challenges in terms of
15 participation, sir, when one can't simply rely upon a
16 -- an income assistance certification of eligibility,
17 for example?

18 MR. PAUL CHERNICK: I -- I think you
19 lost me someplace there. Are -- are you saying that
20 you can't depend upon the --

21 DR. BYRON WILLIAMS: Sir, if --

22 MR. PAUL CHERNICK: -- income
23 assistance certification because perhaps they're
24 already getting assistance with their electric bill,
25 et cetera?

1 DR. BYRON WILLIAMS: I didn't lose
2 you, sir. That's --

3 MR. PAUL CHERNICK: Okay.

4 DR. BYRON WILLIAMS: -- you're --
5 again, you're quite -- your -- your response is better
6 than my question, and I thank you for listening with
7 care.

8 MR. PAUL CHERNICK: Okay.

9 DR. BYRON WILLIAMS: I -- I -- my
10 point is this: In terms of assisting with
11 eligibility, your answer to PUB/GAC-1 suggests a heavy
12 reliance upon referrals and -- and certification from
13 income assistance, agreed, sir?

14 MR. PAUL CHERNICK: Well, that is one
15 (1) -- one (1) approach. I -- I don't know the -- I
16 suggested a heavy reliance, but that's sort half of
17 one (1) sentence of part A. It's one (1) option. In
18 some jurisdictions, where I've looked at the low
19 income residential rate eligibility criteria, there
20 will be a series of government programs, and if you're
21 getting rent assistance or you're getting, you know,
22 food assistance, or you're getting a -- a couple of
23 other programs, then you're -- you're automatically in
24 the low income program, and all you have to do is
25 demonstrate that you're in one (1) of those and you're

1 in. And -- and I was saying it's possible that EIA
2 would be a similar source.

3 But as to your point about -- however
4 you determine income level, if somebody else is
5 already helping these people, then how do we take that
6 into account? That's an interesting question, and one
7 (1) of the things that I think could be fine-tuned
8 over time.

9 DR. BYRON WILLIAMS: And, sir, my --
10 my second point, though, was to the extent that we're
11 aiming at a population that is not in the income
12 assistance stream, but is in the working poor, for
13 want of a better word --

14 MR. PAUL CHERNICK: Okay.

15 DR. BYRON WILLIAMS: -- does that pose
16 particular challenges in terms of participation rates
17 and enrolments, sir?

18 MR. PAUL CHERNICK: Well, it's
19 certainly nice if you have one (1) stop shopping with
20 a government agency. They can tell you immediately
21 whether a household is -- is eligible. Otherwise, you
22 need to get people to submit the appropriate
23 documentation or permission for the revenue authority
24 to provide that documentation, and that creates an
25 opportunity for organizations such as your clients to

1 help inform and -- and facilitate that process.

2 DR. BYRON WILLIAMS: Sir, just --
3 we've been talking about provincial income assistance.
4 I take it you're not aware, sir, whether or not Band
5 assistance, i.e., on -- on a -- on a res -- First
6 Nation reserve provides income assistance to on-
7 reserve rev -- recipients to pay their utility bills,
8 either through direct payment, or through a mon --
9 monthly budget allotment? You're not familiar with
10 whether or not it does?

11 MR. PAUL CHERNICK: No. And I --
12 again, the real issue here is -- is the -- the
13 assistance in whatever -- whatever form it takes,
14 whether it's tied to a utility bill, or -- or food, or
15 housing, or whatever. Is that enough to lift the --
16 the customer out of poverty so that they don't need
17 this assistance?

18 If that's not the case, then as Board
19 Member Grant, pointed out, if you're poor, you're
20 poor, and it doesn't really matter where the money's
21 going out, or in this case, how -- where it -- not
22 enough of it is coming in from -- you're still poor,
23 and having this assistance would be helpful.

24 DR. BYRON WILLIAMS: Mr. Chernick,
25 just to finish off on -- on this area, you previously

1 had indicated you had not conducted a survey of other
2 jurisdictions in terms of enrolment issues. Would
3 that be fair?

4 MR. PAUL CHERNICK: That's correct.

5 DR. BYRON WILLIAMS: Would it be fair
6 to say that you did not research the participation
7 rates for means-tested rate design or bill assistance
8 programs undertaken by utilities?

9 MR. PAUL CHERNICK: I didn't
10 specifically address that.

11 DR. BYRON WILLIAMS: Mr. Chair, I --
12 I've got a -- just -- I -- I've got an hour. I'm
13 going to skip over some -- some issues. If there's
14 more time at the end of the day, I may ask to come
15 back on, but I'll -- I'll try and finish within my
16 fifteen (15) minutes remaining.

17 Mr. Chernick, I wonder if Kristen can
18 pull up for us page 29 of your prefiled evidence. And
19 I think there's a table at the bottom of it. Kristen,
20 it -- it's the -- there it is. Thank you. Table...

21 Mr. Chernick, this provides -- table 3
22 of your evidence provides your estimate of marginal
23 costs prior to the -- Manitoba Hydro's refiled
24 estimate of generation marginal costs. Is that
25 correct, sir?

1 MR. PAUL CHERNICK: Yes.

2 DR. BYRON WILLIAMS: And sir, it would
3 be fair to say that in your -- when we look at this
4 calculation, the second-largest figure focusing on
5 residential would be under Ext of -- of three point
6 three-one cents per kilowatt hour. Is that correct,
7 sir?

8 MR. PAUL CHERNICK: That's correct.

9 DR. BYRON WILLIAMS: That reference to
10 Ext, I presume you're referring to externalities or
11 estimated environmental impacts, sir?

12 MR. PAUL CHERNICK: Yes.

13 DR. BYRON WILLIAMS: And your estimate
14 of externalities accounts for roughly 25 percent of --
15 of the -- for the residential class of the estimated
16 marginal costs of twelve point six-six cents, sir?

17 MR. PAUL CHERNICK: Yes.

18 DR. BYRON WILLIAMS: And with the
19 reduced Manitoba Hydro estimate for generation, it
20 would be substantially more than 25 percent. Would
21 that be fair?

22 MR. PAUL CHERNICK: That's correct.

23

24 (BRIEF PAUSE)

25

1 DR. BYRON WILLIAMS: And, sir, the
2 purpose in considering marginal costs in rate making
3 is to assist customers in receiving appropriate price
4 signals regarding the cost implications of their
5 consumption choices regarding electricity use; agreed?

6 MR. PAUL CHERNICK: Yes.

7 DR. BYRON WILLIAMS: And you'll agree,
8 sir, that Manitoba Hydro's core objective is to supply
9 power adequate for the needs of the Province. Would
10 that be fair?

11 MR. PAUL CHERNICK: That's -- that's
12 certainly the -- the basis of its -- of its mission.
13 I'm sure that there are many other things in its
14 mission statement by now.

15 DR. BYRON WILLIAMS: And sir, in terms
16 of your assessment of the marginal cost of Hydro
17 generation, transmission and distribution, in terms of
18 the estimated externalities or environmental impact,
19 it would be fair to say that you focused on the
20 environmental impacts in -- in the -- in MISO of the
21 marginal energy that Hydro exports displace. Would
22 that be fair, sir?

23 MR. PAUL CHERNICK: In MISO or
24 Saskatchewan, the numbers would be a little bit
25 different for On -- Ontario.

1 DR. BYRON WILLIAMS: You did not
2 undertake an estimate of the environmental
3 implications of avoidable Manitoba Hydro activities in
4 Manitoba?

5 MR. PAUL CHERNICK: That's correct. I
6 -- the marginal effect for increases or reductions in
7 usage of electricity in Manitoba is the amount of --
8 of exports to neighbouring jurisdictions, at least
9 until the -- the resources -- resources required
10 beyond Keeyask, which looks to be quite a ways out.

11 DR. BYRON WILLIAMS: And I understand
12 your point, sir, but you, of course, are aware that in
13 developing this hydroelectric revo -- resource for the
14 Province of Manitoba, there was significant initial
15 and ongoing activity relating to the diversion and
16 damming of riv -- rivers such as the Churchill,
17 Nelson, and Winnipeg?

18 MR. PAUL CHERNICK: Yes. And there
19 are environmental effects of -- of building dams, and
20 if -- if Keeyask were the marginal resource being
21 considered, or Manitoba Hydro were facing a similar
22 project in the foreseeable future, then you might want
23 to take a crack at -- at estimating the environmental
24 costs of that.

25 DR. BYRON WILLIAMS: And sir --

1 MR. PAUL CHERNICK: Valuing the
2 environmental costs of -- of Hydro development is --
3 is quite challenging.

4 DR. BYRON WILLIAMS: And, sir, you're
5 aware that there were significant initial and ongoing
6 activities related to the regulation of water levels
7 for lakes such as Lake Winnipeg associated with
8 Manitoba Hydro development that was and are?

9 MR. PAUL CHERNICK: Yes.

10 DR. BYRON WILLIAMS: And you would no
11 doubt agree that the -- that in terms of habitat
12 fragmentation and degradation there are significant
13 impacts of Manitoba Hydro's activities in Manitoba as
14 well, sir?

15 MR. PAUL CHERNICK: This is true.

16 DR. BYRON WILLIAMS: And you're aware,
17 sir, that Hydro development has had a profound impact
18 upon indigenous people in Manitoba, including
19 significant social and cultural impacts?

20 MR. PAUL CHERNICK: I understand that
21 to be the case, yes.

22 DR. BYRON WILLIAMS: And, of course,
23 in the initial years of operation of a dam such as
24 Keeyask, sir, it will have implications for greenhouse
25 gases and most particularly methane, sir?

1 MR. PAUL CHERNICK: Yes. And, of
2 course, there's carbon dioxide emitted in the
3 production of the concrete for the damn as well.

4 DR. BYRON WILLIAMS: We -- we can go
5 to page 26, at the bottom of Mr. Chernick's evidence.
6 Mr. Chernick, I'm not going to take you to a
7 particular point, but in -- in this section of your
8 evidence you're providing your estimate of the
9 environmental costs associated with energy on the
10 margins that that -- that Hydro is expected to
11 displace in the -- in the US market, specifically
12 MISO; agreed?

13 MR. PAUL CHERNICK: Yes, this section
14 deals with MISO and then I go on to talk about
15 Saskatchewan as well.

16 DR. BYRON WILLIAMS: And, sir, you'll
17 agree that with a similar range of capacity factors
18 you would expect that both gas and coal would be on
19 the -- at the margins in MISO at times?

20 MR. PAUL CHERNICK: Yes.

21 DR. BYRON WILLIAMS: And as well, sir,
22 you'll agree that while historically coal has
23 dominated the margins in MISO, natural gas is playing
24 an increasingly important role with one (1) estimate
25 by MISO suggesting that coal operate in the margin

1 about 90 percent of the time, and gas about 75 percent
2 of the time?

3 MR. PAUL CHERNICK: I think you're
4 reading my evidence very well. Thank you.

5 DR. BYRON WILLIAMS: And you'll agree
6 with that, sir?

7 MR. PAUL CHERNICK: Yes.

8 DR. BYRON WILLIAMS: And it is quite
9 possible, sir, that gas may be more of the marginal
10 mix in peak periods in the MISO market, sir?

11 MR. PAUL CHERNICK: That's probably
12 the case.

13 DR. BYRON WILLIAMS: And is it also
14 your view, sir, that all other things being equal that
15 the retirement of coal plants will tend to increase
16 the marginal gas percentage on the margin?

17 MR. PAUL CHERNICK: Yes.

18 DR. BYRON WILLIAMS: And, sir, in
19 considering the phenomena of retiring coal plants in
20 MISO and the increasing importance of natural gas,
21 would you agree, sir, that a new natural gas combined
22 cycle unit would likely be more efficient than the
23 average existing natural gas combined cycle unit?

24

25

(BRIEF PAUSE)

1 DR. BYRON WILLIAMS: In essence,
2 because it represents state of the art technology,
3 sir?

4

5 (BRIEF PAUSE)

6

7 MR. PAUL CHERNICK: Well, if -- if you
8 look at all of the gas combined cycle plants that
9 exist and look at the -- and compare that to a new one
10 (1), the new one (1) would tend to be more efficient,
11 yes.

12 DR. BYRON WILLIAMS: And so it would -
13 - and thank you for that. And so it would tend to be
14 dispatched more often than average as compared to
15 other -- the existing natural gas combined cycle
16 units?

17 MR. PAUL CHERNICK: Yes. It would
18 tend not to be at the margin when it's operating but
19 it's -- it would be -- certainly the newest, most
20 efficient units would tend to be dispatched most
21 often, all else equal.

22

23 (BRIEF PAUSE)

24

25 DR. BYRON WILLIAMS: Okay. Sir, in --

1 in preparing your evidence relating to marginal costs,
2 did you have occasion to review the report by UM --
3 UMS regarding Manitoba Hydro's practices in terms of
4 the optimization of sustaining capital expenditures?
5 That's appendix 5.1, if memory serves me right.

6 MR. PAUL CHERNICK: I don't believe
7 that I did.

8 DR. BYRON WILLIAMS: 5.3, I misspoke,
9 sir.

10 MR. PAUL CHERNICK: What --

11 DR. BYRON WILLIAMS: Ms. -- Ms. Dilay
12 --

13 MR. PAUL CHERNICK: You can keep --
14 you can keep raising your -- your bid on this, but I
15 don't think I've seen it, no.

16 DR. BYRON WILLIAMS: And, sir, in
17 terms of your analysis, it would be fair to say you
18 did not test or examine whether the sustaining capital
19 expenditures in the capital expenditure forecast 2016
20 are optimized, prudent, or reasonable? That wasn't
21 part of your analysis?

22 MR. PAUL CHERNICK: No, I have not
23 done that analysis.

24 DR. BYRON WILLIAMS: I'm jumping back
25 to some of the stuff I skipped, panel, Chair. Perhaps

1 if we can turn to Manitoba Hydro's response to -- oh,
2 excuse me -- PUB/GAC question Number 5.

3

4 (BRIEF PAUSE)

5

6 DR. BYRON WILLIAMS: Mr. Chernick,
7 just in your -- you, in the first line -- just to add
8 to Mr. Hacault's enjoyment for the day -- in the first
9 line of this response, you say that you do not believe
10 that P-COSS18 provides much clarity regarding the
11 costs attributable to each class.

12 You see that statement, sir?

13 MR. PAUL CHERNICK: Yes.

14 DR. BYRON WILLIAMS: And would you
15 care to elaborate on that, sir?

16 MR. PAUL CHERNICK: Well, if you think
17 back to the cost of service proceeding, I had a number
18 of disagreements with Manitoba Hydro about their
19 allocation of costs, and the Board did not agree with
20 me about all of those. And there are a number of
21 issues where -- in terms of how costs are incurred,
22 what drives the costs, that -- where I -- I believe
23 that -- I believe that the -- that the cost of service
24 study attributes too much to -- to be peak load and
25 not enough to -- to energies.

1 DR. BYRON WILLIAMS: Okay. I'm -- I'm
2 going to bounce around here, Mr. Chernick. You also
3 noted both in your PowerPoint and your direct evidence
4 some concerns that you were not provided with Manitoba
5 Hydro's marginal generation cost estimates des --
6 disaggregated into capacity and energy and by season;
7 agreed?

8 MR. PAUL CHERNICK: That's correct.

9 DR. BYRON WILLIAMS: And that poses
10 challenges in evaluating the company's rate design
11 proposals in developing alternatives.

12 Would that be fair?

13 MR. PAUL CHERNICK: Yes.

14 DR. BYRON WILLIAMS: And --

15 MR. PAUL CHERNICK: And I -- I would
16 by time of -- of use as well. But you -- you have to
17 know something about the difference between on peak
18 and off-peak values.

19 DR. BYRON WILLIAMS: And, Mr.
20 Chernick, I can take you there if you need, but do you
21 recall making a statement in your evidence that there
22 are methodologies related to marginal costs widely
23 accepted by other utilities that are reviewable by
24 intervenors?

25 MR. PAUL CHERNICK: Yes. Most

1 utilities' marginal cost estimates are fully public
2 and reviewable. In some cases there's materials that
3 are confidential that back up assumptions about fuel
4 prices, for example, or contracts that are released to
5 intervenors only under confidentiality agreements.

6 DR. BYRON WILLIAMS: Sir, in the two
7 (2) minutes that we have remaining can you elaborate
8 on what some of these methodologies are to assist our
9 clients?

10 MR. PAUL CHERNICK: Well, they rely
11 heavily on -- on estimates of the operations of the
12 interconnected system, which in the case of Manitoba
13 would be at least the northern part of MISO and
14 Saskatchewan and perhaps also Ontario. And --

15 DR. BYRON WILLIAMS: I don't
16 understand what that means, sir, so I -- I --

17 MR. PAUL CHERNICK: The interconnected
18 system?

19 DR. BYRON WILLIAMS: Yeah, like, "rely
20 heavily." That's, like, give me -- give us an
21 example.

22 MR. PAUL CHERNICK: Okay. So
23 typically what you would do is, you would run a
24 production costing model that would simulate the
25 operations of the power plants in all of those areas,

1 including the operation of Manitoba Hydro's hydro
2 facilities for its own load and for exports. And you
3 would record the -- the value of the sales at the
4 times they were being made.

5 And that's dependent upon the gas
6 prices and the -- and the coal prices in Saskatchewan
7 and in MISO, and gas prices in Ontario and the
8 operation of the Ontario system with its renewables,
9 and the mix of resources in each of those
10 jurisdictions. And it's a computer model estimating
11 how the system reacts to load, how -- how the
12 generation system will be dispatched to meet load.
13 And, hence, what the marginal cost is in each hour.
14 And that doesn't depend upon export contract
15 projections, for example.

16 DR. BYRON WILLIAMS: I'm just noting
17 the time, sir. And I'll -- I'll -- I -- I think that
18 canvassed at lease what we were hoping to get done.
19 So we appreciate the opportunity. I'll stand down and
20 let my -- others...

21 THE CHAIRPERSON: Thank you, Dr.
22 Williams. Me. Monnin...?

23

24 CROSS-EXAMINATION BY MR. CHRISTIAN MONNIN:

25 MR. CHRISTIAN MONNIN: Thank you, Mr.

1 Chair, members of the panel, Mr. Chernick. I think
2 much of what I had to cover is now well-tilled soil,
3 so I don't expect I'll be more than five (5) minutes
4 with Mr. Chernick. I just have, at my last count,
5 eight (8) questions.

6 Mr. Chernick, you'd agree with me that
7 Manitoba Hydro is proposing an across-the-board rate
8 increase of 7.9 percent for all rate classes or al
9 ratepayers?

10 MR. PAUL CHERNICK: I understand
11 that's the latest value, yes.

12 MR. CHRISTIAN MONNIN: And your
13 proposed rate changes, in particular the affordable
14 rates for low income customers and the affordable rate
15 for heating customers, would be in addition to
16 Manitoba Hydro's proposed rates; correct?

17 MR. PAUL CHERNICK: Well, it would be
18 a reduction for those groups. And it would result in
19 an increase for other groups, yes.

20 MR. CHRISTIAN MONNIN: Okay. Then for
21 those other groups it's implied in that. So the
22 proposed recovery rates that you are suggesting are to
23 be paid by all other ratepayers who are not getting
24 the discounted rates.

25 Is that fair?

1 MR. PAUL CHERNICK: Yes.

2 MR. CHRISTIAN MONNIN: Okay. And, Mr.
3 Chernick, your evidence this morning and also your
4 evidence in your written filing, you state that your
5 proposed rates are only estimates.

6 Is that correct?

7 MR. PAUL CHERNICK: Yes.

8 MR. CHRISTIAN MONNIN: And given that
9 your proposed rates are only estimates, it's fair to
10 say that your calculation of the lost revenues for
11 these proposed rates are also only estimates?

12 MR. PAUL CHERNICK: Yes, and
13 specifically those were the -- I think that was the
14 estimate I was speaking about was --

15 MR. CHRISTIAN MONNIN: Okay. Well,
16 you're also speaking about the judgement that the
17 Board can use either scaling up or scaling down. That
18 would be contingent on --

19 MR. PAUL CHERNICK: Yes.

20 MR. CHRISTIAN MONNIN: Okay. So
21 there's --

22 MR. PAUL CHERNICK: That's -- that's a
23 -- that's sort of a different issue than -- than the
24 estimation. It's -- my specific proposals in terms of
25 the extent of the discount, the number of kilowatt

1 hours in the discount, that's something that the Board
2 could certainly modify. But then the results of that
3 in terms of -- of the effect on rates for other
4 customers is something that Manitoba Hydro can model.
5 And if -- and the Board could certainly say, you know,
6 be -- before you implement these rates get back to us
7 if the rate effect is more than whatever amount the
8 Board feels comfortable with.

9 MR. CHRISTIAN MONNIN: Okay. So the
10 take away from that is that your -- your estimates are
11 just that, until they're updated with billing
12 determinants; correct?

13 MR. PAUL CHERNICK: Yes.

14 MR. CHRISTIAN MONNIN: And until
15 there's a billing determinant -- determinants that are
16 provided, the impact from those billing determinants
17 might be upward or downward, but we don't know because
18 they're estimates.

19 Is that fair to say?

20 MR. PAUL CHERNICK: Yes, That's
21 correct.

22 MR. CHRISTIAN MONNIN: No further
23 questions. Thank you.

24 THE CHAIRPERSON: Thank you. Mr.
25 Hacault...?

1

2 CROSS-EXAMINATION BY MR. ANTOINE HACAULT:

3 MR. ANTOINE HACAULT: Good afternoon,
4 Mr. Chernick. I have questions in two (2) areas.
5 First is your marginal cost calculations, and just to
6 better understand the calculations that you put in
7 your slide 21. Could we please have that on the
8 screen, Kristen.

9

10 (BRIEF PAUSE)

11

12 MR. ANTOINE HACAULT: Slide 21.

13

14 (BRIEF PAUSE)

15

16 MR. ANTOINE HACAULT: On this
17 particular slide in the third column, you have
18 Manitoba Hydro revised with numbers. For example, in
19 the residential class at five-point-seven-five (5.75)
20 cents.

21 Do you see that, sir?

22 MR. PAUL CHERNICK: Yes.

23 MR. ANTOINE HACAULT: Do you recall
24 which Information Request you got the data that's
25 shown is Manitoba Hydro revised?

1 MR. PAUL CHERNICK: I believe that's
2 from PUB-2-57(r), but let me check because I think I
3 have that open.

4

5 (BRIEF PAUSE)

6

7 MR. PAUL CHERNICK: Yes, PUB/Manitoba
8 2.57 -- 2-57 revised. And that shows five-point-
9 seven-five (5.75) with the 14 percent loss factor, and
10 then I scaled it down for the 10 percent loss factor
11 applied for the transmission customers.

12 MR. ANTOINE HACAULT: Okay. The
13 reason I was wondering is because GAC, so that's your
14 Information Request second -- Manitoba Hydro 2nd Round
15 24(b) updated, showed a total cost for the last
16 categories of GSL-30-100 and GSL over a 100, just a
17 slightly different number of --

18 MR. PAUL CHERNICK: Yeah, there are --

19 MR. ANTOINE HACAULT: -- four-point-
20 seven-seven (4.77) instead of four-point-seven-nine
21 (4.79). So I wasn't sure where you got your data.

22 MR. PAUL CHERNICK: Right. And the --
23 the numbers do tend -- tend to come in differently,
24 depending upon the rounding and where it occurs.
25 Hundreds of -- of a cent aren't significant from my

1 perspective for this kind of comparison. You -- you
2 want to get it right when you're actually setting the
3 rate, but for looking at whether we're -- whether the
4 energy rate is above or below the marginal cost, you
5 don't have to worry about the hundreds of a cent.

6 MR. ANTOINE HACAULT: And am I correct
7 that you adjusted for load factor issues in the
8 transmission data and the distribution data only?

9 MR. PAUL CHERNICK: That's correct. I
10 wasn't able to do that explicitly in the generation.

11 MR. ANTOINE HACAULT: Okay. Would you
12 agree with Mr. Barnlund's evidence that if you were
13 able to do that for the generation data that this
14 would push the generation number for residential
15 customers up?

16 MR. PAUL CHERNICK: Oh, it would push
17 all of the numbers up.

18 MR. ANTOINE HACAULT: Okay. Thank
19 you. And that's because the data that was provided by
20 Manitoba Hydro doesn't adjust for load factors in the
21 generation; correct?

22 MR. PAUL CHERNICK: Right. It assumes
23 a absolutely flat load. No excess of load at high
24 load times over low load, and no excess of peak over
25 average. And for the very largest customers that

1 ratio may be about 90 percent. The average load to
2 the -- to the peak load may be that 90 percent, but
3 for the smaller customers, it's closer to 50 percent.

4 MR. ANTOINE HACAULT: In fact, it's in
5 Mr. Harper's evidence, and also in this filing. For
6 example, the GSL large over 100 curtailable is 97.4
7 percent load factor, very close to 100 percent.

8 MR. PAUL CHERNICK: Oh, the
9 curtailable has -- of course, has a very high load
10 factor, yes.

11 MR. ANTOINE HACAULT: So somebody like
12 that would need practically no adjustment at all;
13 correct?

14 MR. PAUL CHERNICK: That's correct.

15 MR. ANTOINE HACAULT: Now, I'll switch
16 to the second subject I said I would address. It's to
17 do with -- on the issue that Dr. Williams addressed,
18 being whether there's any difference between the
19 profile of a person who pays income tax and
20 contributes to a social program, versus the person
21 paying Hydro rates or Hydro revenues. Could we start
22 firstly with Minimum Filing Requirement 72. That's
23 the Boston Consulting slide at page 208, please,
24 Kristen.

25

1 We've seen this slide a couple of
2 times, Mr. Chernick, and it's been discussed a lot
3 with respect to the red circle in the lower left-hand
4 corner, being residential low income.

5 Do you see that? Have you never seen
6 this slide, sir?

7 MR. PAUL CHERNICK: It looks vaguely
8 familiar. It maybe is something that I -- I went
9 through looking for some specific data, but I -- I --
10 well, I have to think about what the slide's saying
11 before I can answer your questions.

12 MR. ANTOINE HACAULT: I'm not -- I --
13 I don't intend to ask a lot of questions, except to
14 ask you whether you considered, as these consultants
15 did, the impact on the largest or the nine (9) largest
16 industrials of rate increases.

17 Did you consider that, sir?

18 MR. PAUL CHERNICK: No, I -- I did not
19 look at this and I would need to know more to
20 understand what the -- how -- how they wound up with
21 that particular point and at -- at that location.

22 MR. ANTOINE HACAULT: So, sir, is it
23 fair to say then that you didn't assess whether any of
24 the largest industrials in this provinces -- province
25 --

1 MR. PAUL CHERNICK: I --

2 MR. ANTOINE HACAULT: -- might have
3 challenges in absorbing higher rates?

4 MR. PAUL CHERNICK: I have not looked
5 at -- at them individually, no.

6 MR. ANTOINE HACAULT: Okay. And, sir,
7 I'll bring you to Mr. Bowman's chart at page 7-3 of
8 his evidence. It's MIPUG Exhibit 13. We've looked at
9 this slide also in this hearing, and in the extreme
10 right-hand side on the bottom right under surplus or
11 shortfall for the GSL greater than 100. If we could
12 perhaps zoom in a bit more, Kristen.

13

14 (BRIEF PAUSE)

15

16 MR. ANTOINE HACAULT: You will see
17 that TT and I'm mindful of your comments that you
18 don't think that this tells us much. The general
19 service large over 100 kV the under this calculation
20 are contributing some \$19.81 million over the -- the
21 baseline.

22 Do you see that, sir?

23 MR. PAUL CHERNICK: I see that.

24 MR. ANTOINE HACAULT: Okay. Now, if I
25 put to you that a struggling pulp and paper mill and a

1 struggling mine might have a different income profile
2 than other companies in this province that might be
3 equally as large, but might that be a possibility that
4 you'd be prepared to accept, sir?

5 MR. PAUL CHERNICK: That there might
6 be some large industrials that are financially
7 marginal, is that -- that's the question?

8 MR. ANTOINE HACAULT: Yeah.

9 MR. PAUL CHERNICK: Yes, I would agree
10 that that's certainly a possibility.

11 MR. ANTOINE HACAULT: And when it
12 comes to social programs, and Dr. Williams asked you
13 what your preference would be, whether in a perfect
14 world you would get the social program out of income
15 tax or out of Hydro rates, I understood you to say
16 your preference would be out of income tax because it
17 relates to the ability to pay.

18 Did I understand that correct?

19 MR. PAUL CHERNICK: Yes. And -- and
20 again, I -- I had a lot of caveats around that and the
21 details of -- of the -- the tax structure and who's
22 paying and so on. But if somebody just asked me that
23 question in general about an unspecified jurisdiction,
24 that's generally my preference.

25 Although, there are also situations

1 where, as in Manitoba, where the revenue requirement
2 is from many classes. The allocated revenue
3 requirement is well below their -- the marginal cost
4 of service. And you can get more efficient pricing by
5 raising those rates. So perhaps here and some other
6 places it may be more efficient to bill some of the --
7 the nonresidential through their electric bills rather
8 than their income taxes. But it's a complicated
9 issue.

10 MR. ANTOINE HACAULT: But, sir,
11 although it's complicated would you at least
12 acknowledge that there is a difference in the profile
13 of a marginal pulp and paper mill and a marginal
14 mining operation in terms of net or negative income,
15 as a may have losses as compared to other businesses
16 who might be fairly profitable and paying income tax?

17 MR. PAUL CHERNICK: Yes, and -- and
18 that is true within any category as you may have
19 industries that are -- are very profitable and some
20 that are -- are barely making money, if at all. And
21 the same may be true for law firms and supermarkets
22 and -- and all kinds of operations.

23 MR. ANTOINE HACAULT: And I won't go
24 through the numbers again, but Dr. Williams went
25 through some of the estimated impacts on the general

1 service large sector --

2 MR. PAUL CHERNICK: M-hm.

3 MR. ANTOINE HACAULT: -- of your rate
4 proposals should they be asked to help pay for this
5 social program helping lower rates.

6 That would pile on to the approximately
7 \$20 million that they are already paying into the pot;
8 correct?

9

10 (BRIEF PAUSE)

11

12 MR. PAUL CHERNICK: Well, I'm not sure
13 you could add that in. I think if you're going to say
14 we have a cost category which, like a tax, is going to
15 be collected from all in proportion to their usage,
16 then that would really, really ought to be in there as
17 an expense, just as if it were a tax in this analysis,
18 and so that it would be a wash. So I'm -- I'm
19 uncomfortable with endorsing the \$20 million to begin
20 with, and I'm not sure that you could really say that
21 you're adding to it. But it would raise the rates if
22 that's the point that you're making.

23 And if -- if you believe that there are
24 -- that certain customers are overpaying and some of
25 them are in bad -- a bad condition to pay their bills,

1 then it would make those situations worse. And as I
2 mentioned earlier, there are jurisdictions that have
3 decided to offer some industrial firms who are
4 vulnerable to global competition and are paying their
5 way the opportunity to -- to seek a discounted rate to
6 keep them on the system, paying their property taxes,
7 paying -- paying their payroll. And that might be a
8 solution for any of your clients who are in distress,
9 assuming that they can demonstrate that they are
10 paying enough to at least make up for the lost export
11 revenues.

12 MR. ANTOINE HACAULT: But, sir, as
13 part of your package to the low income people, you
14 haven't analyzed what would be required of these
15 marginal large consumers, and of the type of
16 assistance they would require to avoid shutting down?

17 MR. WILLIAM GANGE: Mr. Chair, we've
18 gone a long way down the hypothetical trail here. The
19 -- the -- there is no evidence of companies in dire
20 straits. There is no -- there -- there is no evidence
21 to -- to justify the foundation for the questions that
22 are being put to Mr. Chernick. So I was prepared to
23 have -- have a general discussion and have Mr.
24 Chernick answer the general type of questions. But --
25 but we're too far down that path at this point. So I

1 object to the questions.

2 THE CHAIRPERSON: Okay. Mr.
3 Hacault...?

4

5 CONTINUED BY MR. ANTOINE HACAULT:

6 MR. ANTOINE HACAULT: Okay. Mr.
7 Chernick, you haven't done any analysis with respect
8 to whether there's any companies that are vulnerable?
9 That's not a hypothetical question.

10 THE CHAIRPERSON: Well, no, but I -- I
11 guess then the answer is no. So I don't know what
12 further -- if he hasn't done it -- if he hasn't done
13 any study, which he's according to my notes said three
14 (3) times, if he hasn't done any study I don't know
15 what other information you can elicit from him on the
16 point.

17 You asked if he'd looked at it, if he'd
18 looked at companies had problems, programs. And the
19 answer is no, he hasn't looked at any of them. And I
20 -- I suspect that on this point, if you keep asking
21 the answer's going to continue to be no. He hasn't
22 looked at the points. So I think you might want to
23 move on.

24 MR. ANTOINE HACAULT: No, I just
25 wanted to -- I wasn't sure I had a clear answer

1 because his answers were fairly lengthy, but if the
2 answer is clear that actually completes my
3 questioning. Thank you.

4 THE CHAIRPERSON: Okay. Thank you.
5 Yeah, I was going to say I -- we'll take a break for
6 fifteen (15) minutes now. Thank you.

7

8 --- Upon recessing at 2:22 p.m.

9 --- Upon resuming at 2:40 p.m.

10

11 THE CHAIRPERSON: Ms. Fernandes...?

12 MS. ODETTE FERNANDES: Thank you, Mr.
13 Chair. You'll be happy to note and I'm thankful as a
14 result of my voice that as a result of questions posed
15 by Intervenors, my cross-examination has been reduced
16 quite a bit. So I'm hoping to be about fifteen (15)
17 minutes or so.

18 THE CHAIRPERSON: We thought you would
19 just get sort of deeper and deeper as you went into
20 it; having been there. So, please proceed.

21 MS. ODETTE FERNANDES: Thank you.

22

23 CROSS-EXAMINATION BY MS. ODETTE FERNANDES:

24 MS. ODETTE FERNANDES: Good afternoon,
25 Mr. Chernick.

1 MR. PAUL CHERNICK: Good afternoon.

2 MS. ODETTE FERNANDES: If I could get
3 you to please to turn to your slide 8 in your
4 presentation from this morning.

5 Now, if I go under -- Manitoba Hydro
6 underestimate -- underestimates marginal costs, you
7 have a comment there that:

8 "Manitoba Hydro omits all
9 environmental costs."

10 Correct?

11 MR. PAUL CHERNICK: Yes.

12 MS. ODETTE FERNANDES: Now, could I
13 get you to agree with me that generation marginal cost
14 values are derived and are very closely related to
15 export price forecasts?

16 MR. PAUL CHERNICK: That's my
17 understanding.

18 MS. ODETTE FERNANDES: And would you
19 agree that there are carbon pricing assumptions that
20 are included in the energy export price forecasts?

21 MR. PAUL CHERNICK: I don't --

22 MS. ODETTE FERNANDES: Maybe in order
23 to --

24 MR. PAUL CHERNICK: -- I don't know
25 that -- that I can say that.

1 MS. ODETTTE FERNANDES: Okay, if I --
2 if I can get the Daymark report on exports pulled up,
3 please. Page 41. Thank you.

4 If we look at the top paragraph it
5 says:

6 "In addition to natural gas prices,
7 carbon pricing assumptions are an
8 important assumption used in many
9 energy price forecasts."

10 And then they go on to compare the
11 carbon forecasts, and then the Manitoba Hydro
12 consented methodology. So you'll see there that
13 carbon pricing is an assumption in the energy price
14 forecasts?

15 MR. PAUL CHERNICK: Well, it says that
16 it's used in many energy price forecasts and it -- in
17 this next sentence says that, the figure which we
18 can't see has the forecast resulting -- the forecast
19 you would get based on the MH consensus methodology
20 and it's not clear whether Daymark applied that
21 methodology to carbon prices, or whether that was --
22 that was actually in the forecast that Manitoba Hydro
23 used. It -- it's a little vague. It's certainly
24 possible that there are some carbon prices in there.

25 MS. ODETTTE FERNANDES: All right. And

1 if there are carbon prices included in the generation
2 marginal costs, you'd agree with me then that there
3 are at least some environmental costs included?

4 MR. PAUL CHERNICK: Yes, that would
5 follow.

6 MS. ODETTE FERNANDES: All right. And
7 in terms of the transmission, marginal costs for
8 transmission projects, would you agree with me that
9 they are all in costs? And by that I mean that the
10 total cost of the transmission includes the
11 environmental impacts of that transmission project?

12 MR. PAUL CHERNICK: It's my
13 understanding that the cost estimates for the
14 transmission projects would include whatever
15 environmental mitigation costs are incurred by
16 Manitoba Hydro, not any residual externalities, but
17 that -- that the costs of -- of preventing runoff into
18 streams as you're doing construction and perhaps
19 maintaining wildlife corridors or something, that that
20 would typically be included in the cost estimate.

21 MS. ODETTE FERNANDES: Okay, thank
22 you. If I can turn to the next slide, please, slide
23 Number 9 of your presentation.

24 Now, if I look at -- you've got
25 materialistic estimates for residential T and D costs

1 would be roughly double Manitoba Hydro estimate for
2 transmission and then triple the estimate for
3 distribution?

4 MR. PAUL CHERNICK: Yes.

5 MS. ODETTE FERNANDES: And I think our
6 people back at the office are having a little bit of
7 trouble with respect to coming up with these
8 calculations.

9 So I'm wondering if you can undertake
10 to provide us your calculation for, I guess, each of
11 the headings here and how you've come to the double
12 the estimate for transmission and triple the estimate
13 for distribution?

14 MR. PAUL CHERNICK: Oh, by each of the
15 headings you mean how do the various things that I
16 mention here come to the doubling the estimate for
17 transmission --

18 MS. ODETTE FERNANDES: Yes.

19 MR. PAUL CHERNICK: -- and tripling
20 for distribution. Yes. And the -- I can actually
21 give you a really quick answer on the transmission
22 which is that since the load factor for residential is
23 I believe a bit under 50 percent, that in itself
24 doubles the transmission cost.

25 For the distribution, these other

1 adjustments matter as well. But, I'll -- I can
2 certainly provide that undertaking.

3 MS. ODETTE FERNANDES: Okay and maybe
4 I will get you to restate it for the court reporter.

5 MR. PAUL CHERNICK: Okay, that I'll
6 undertake to provide the basis for my statements at
7 the bottom of slide 9 that realistic estimates would
8 be roughly double Hydro's estimate for transmission
9 and triple Hydro's estimate for distribution.

10

11 --- UNDERTAKING NO. 40: Mr. Chernick to provide
12 the basis for his
13 statements at the bottom
14 of slide 9 that realistic
15 estimates would be roughly
16 double Hydro's estimate
17 for transmission and
18 triple Hydro's estimate
19 for distribution.

20

21 CONTINUED BY MS. ODETTE FERNANDES:

22 MS. ODETTE FERNANDES: Thank you. If
23 I can turn to your slide 19 just very briefly.

24 You'd agree with me, Mr. Chernick, that
25 for the estimates of marginal generation costs this

1 Board has already ruled on multiple occasions that
2 that information is commercially sensitive
3 information?

4 MR. PAUL CHERNICK: Yes.

5 MS. ODETTE FERNANDES: All right. And
6 in terms of your -- it's about the middle of the page
7 you say:

8 "Marginal costs was not reviewed by
9 Daymark so no external review."

10 If I could please have the response to
11 PUB-MH-1-131 (b) to (c). If you can scroll down,
12 please.

13 And so you'll see that although this
14 information was redacted, it was provided in response
15 to this IR; correct?

16 MR. PAUL CHERNICK: There was some
17 breakdown between summer and winter and between
18 generation energy and capacity provided to the Board
19 in that table.

20 MS. ODETTE FERNANDES: And so you'd
21 agree --

22 MR. PAUL CHERNICK: Yes.

23 MS. ODETTE FERNANDES: -- you'd agreed
24 with me then that the Board advisors would have been
25 provided with this information and would have reviewed

1 that information?

2 MR. PAUL CHERNICK: Yes. It's not
3 clear to me that it was a matter of any -- of concern
4 for the advisors given their charge, but they would
5 have had access to a somewhat more disaggregated
6 values than -- than we've seen now.

7 MS. ODETTE FERNANDES: Okay. Thank
8 you. Now I believe in your comments this morning you
9 indicated that it's very common to have a low income
10 rate design in other jurisdictions?

11 MR. PAUL CHERNICK: Yes.

12 MS. ODETTE FERNANDES: Do you recall
13 making that comment? And are you aware of any
14 Canadian Utilities that have a low income rate design?

15 MR. PAUL CHERNICK: No, not off the
16 top of my head, but I haven't really looked for that.

17 MS. ODETTE FERNANDES: And in terms of
18 a space heating rate, are you aware of any Canadian
19 Utilities which have a space heating rate?

20 MR. PAUL CHERNICK: Again, I'm not
21 aware of that one way or the other. I really haven't
22 looked for Canadian Utilities specifically.

23 MS. ODETTE FERNANDES: Okay, thank
24 you. Now, other legal counsel have already gone a bit
25 through the discount rates proposed in your report.

1 I'd just like to look at in a little bit more detail
2 the LICO-125 rate discount that is income based.

3 Now, on page 34 of your evidence ...
4 and right there is perfect. Thank you. You indicate
5 that it would be preferable to vary the discount to
6 reflect the customer's income level; that's about at
7 line 20?

8 MR. PAUL CHERNICK: Yes.

9 MS. ODETTE FERNANDES: And you
10 indicate perhaps measured as a percentage of the low
11 income cutoff for the household side -- household
12 size; correct?

13 MR. PAUL CHERNICK: Yes.

14 MS. ODETTE FERNANDES: All right. And
15 Mr. Chernick, would you accept that many low income
16 persons do not file tax returns?

17 MR. PAUL CHERNICK: I don't have any
18 specific information on that but that seems like a
19 reasonable assumption.

20 MS. ODETTE FERNANDES: And one (1) of
21 the challenges, if I can put it that way, with respect
22 to income tax returns is that they are refreshed every
23 year, correct?

24 MR. PAUL CHERNICK: That's correct.

25 MS. ODETTE FERNANDES: And we've had

1 evidence in this proceeding from Dr. Mason. I don't
2 know if you've heard of him referenced at all by GAC?

3 MR. PAUL CHERNICK: M-hm.

4 MS. ODETTE FERNANDES: And he was
5 retained in order to assist with the bill
6 affordability collaborative process, and if I can get
7 transcript page 2333, please. If you can scroll down
8 a little bit, please. Thank you, right there.

9 And Mr -- Dr. Mason indicates that --
10 see, you'll see on about line 12 he says:

11 "Canada revenue agency is very
12 careful in how they allow the income
13 tax rules to be used. You can't
14 simply link to the income tax
15 database. It will never allow its
16 records to be used to determine
17 eligibility directly unless the
18 program is embedded within the tax
19 reform and that usually requires an
20 agreement between the federal and
21 provincial government."

22 Would you agree with that statement?

23 MR. PAUL CHERNICK: I don't know what
24 CRA's policies are in that regard.

25 MS. ODETTE FERNANDES: Okay. If I can

1 get PUB-GAC-1, please.

2 In this IR you were asked to collect
3 income information and determine eligibility for the
4 discounted lower income rates, and you've indicated
5 that your understanding was that Manitoba Hydro
6 currently determines LICO-125 qualifications based on
7 the affordable energy program; correct?

8 MR. PAUL CHERNICK: Or that's the
9 eligibility criterion for the affordability energy
10 program, yes.

11 MS. ODETTE FERNANDES: And you've also
12 indicated that for those customers already qualified
13 for the affordable energy program, eligibility for
14 LICO rate should be automatic; correct?

15 MR. PAUL CHERNICK: Yes.

16 MS. ODETTE FERNANDES: Now, are you
17 aware that the affordable energy program requires
18 individuals to apply for the program?

19 MR. PAUL CHERNICK: Yes.

20 MS. ODETTE FERNANDES: And would you
21 accept that -- and we've heard evidence in this
22 proceeding, that in terms of the history of income
23 assistance programs a surprising number of people who
24 are eligible do not, in fact, apply?

25 MR. PAUL CHERNICK: That is -- that's

1 often the case, yes.

2 MS. ODETTE FERNANDES: And are you
3 aware that under the affordable energy program
4 Manitoba Hydro does not income qualify residents on
5 First Nation communities?

6 MR. PAUL CHERNICK: Yes, I think that
7 was brought up in the cross-examination by the
8 Association (sic) of Manitoba Chiefs and I agreed that
9 if -- if there's an automatic certification for the --
10 anybody living on the reserve, and that's a reasonable
11 proxy for low income than that would be adequate for
12 this -- for the low income rate.

13 MS. ODETTE FERNANDES: And I believe
14 it was in one of the response shown to you this
15 morning but were you aware that Manitoba Hydro is
16 considering other measures to income qualify other
17 than the LICO-125 because of the challenges associated
18 with verifying income?

19 MR. PAUL CHERNICK: I believe that
20 I've seen Manitoba Hydro mentioning that and, again, I
21 don't have any particular commitment to the LICO-125.
22 I -- I'd be perfectly happy with a -- a different
23 measure that addresses lower income people in an
24 efficient way.

25

1 (BRIEF PAUSE)

2

3 MS. ODETTE FERNANDES: Now looking at
4 the affordable energy program, it wouldn't be a
5 surprise to you, would it, Mr. Chernick, that when the
6 applications come in they need to be reviewed by
7 staff?

8 MR. PAUL CHERNICK: I -- I assume
9 there would be some level of review, yes. I mean,
10 somebody has to take something that comes in generally
11 on paper, or perhaps as an email and turn it into a --
12 say yes, all the right pieces are here, at least, and
13 get it into the -- the program.

14 MS. ODETTE FERNANDES: And in term --
15 and part of ensuring that all the right pieces are in
16 place, you'd agree that there are times that all the
17 right pieces are not in place? There could be --

18 MR. PAUL CHERNICK: I would expect
19 that to be the case.

20 MS. ODETTE FERNANDES: There could be
21 information missing?

22 MR. PAUL CHERNICK: Yes.

23 MS. ODETTE FERNANDES: There would
24 need to be follow-up either by way of email or phone
25 call?

1 MR. PAUL CHERNICK: I would expect
2 that to be the case.

3 MS. ODETTE FERNANDES: And that would
4 all be staff that would perform that type of follow-up
5 and verification; correct?

6 MR. PAUL CHERNICK: That could be
7 Hydro staff. Hydro might want to contract with an
8 appropriate contractor to carry out that -- that work
9 if that's easier in terms of the ramping up and
10 implementing the program.

11 MS. ODETTE FERNANDES: Correct and
12 there would be an administrative cost associated with
13 that.

14 MR. PAUL CHERNICK: Certainly, there's
15 some cost involved in administering any kind of
16 program.

17 MS. ODETTE FERNANDES: And if we look,
18 for example, at the Neighbours Helping Neighbours
19 program. If you can pull up Manitoba Hydro's Exhibit
20 88, page 27.

21 Now, this is a program offered by
22 Manitoba Hydro in conjunction with the Salvation Army
23 and you'll see that the total expenses in the column
24 to the very right is about \$3.7 million?

25 MR. PAUL CHERNICK: Isn't that the sum

1 of the grants re -- awarded and the Salvation Army
2 administrative expenses; that's the total expenses,
3 including the grants.

4 MS. ODETTE FERNANDES: Yes.

5 MR. PAUL CHERNICK: Okay.

6 MS. ODETTE FERNANDES: And then the
7 administrative expenses, if you look to the second
8 column from the right, the administrative expenses for
9 Salvation Army's portion is about \$1.06 million,
10 correct?

11 MR. PAUL CHERNICK: Yes.

12 MS. ODETTE FERNANDES: And if I do the
13 math, which lawyers typically aren't supposed to do,
14 that's about 30 percent?

15 MR. PAUL CHERNICK: The administrative
16 expenses in this case are 30 percent of the grant
17 awards.

18 MS. ODETTE FERNANDES: Yes.

19 MR. PAUL CHERNICK: Yes.

20 MS. ODETTE FERNANDES: And you'd agree
21 that in any type of program you run the costs
22 associated with putting the infrastructure in place
23 and maintaining the program would have to be
24 recovered?

25 MR. PAUL CHERNICK: Yes.

1 MS. ODETTE FERNANDES: Thank you, Mr.
2 Chernick. Mr. Chair, those are our questions.

3 THE CHAIRPERSON: Thank you. Ms.
4 Steinfeld?

5 MS. DAYNA STEINFELD: Thank you, Mr.
6 Chair. At the outset I'll indicate that Board counsel
7 originally had an hour scheduled for cross-examination
8 which was a function, essentially, of the time that
9 was remaining once parties had received their requests
10 for cross-examination of this witness.

11 With the indulgence of the panel, I may
12 take a bit more than an hour, although I'll -- I'll
13 try to be concise where I can, if that's appropriate.
14 Thank you.

15

16 CROSS-EXAMINATION BY MS. DAYNA STEINFELD:

17 MS. DAYNA STEINFELD: And good
18 afternoon, Mr. Chernick. My name is Dayna Steinfeld.
19 I'm one (1) of the Board counsel in this proceeding
20 and I have an hour or so of questions for you and I
21 thank you in advance for taking time with me.

22 I'd like to start with your evidence on
23 marginal cost and I'm going to apologize for this but
24 I'd like to take a step back and look at it at a high
25 level.

1 Can you explain to the panel what
2 marginal cost is?

3 MR. PAUL CHERNICK: Yeah, the idea of
4 marginal cost is to determine or estimate the
5 additional costs incurred by additional load or
6 avoided by reductions in load and that would include
7 generation energy and the capacity costs for
8 generation, transmission and distribution.

9 And costs can mean lost revenues from
10 exports and it can also mean additional outlays of
11 cash by Manitoba Hydro.

12 MS. DAYNA STEINFELD: And if I use the
13 terms "marginal cost" and "marginal value"
14 interchangeably as I ask these questions, does that
15 work for you or am I -- am I missing something
16 important?

17 MR. PAUL CHERNICK: Well, it depends
18 on the context value obviously has a lot more
19 meanings. "Value" often is the opposite of "cost"
20 that the -- the value of having this transmission line
21 is different than the cost of having the transmission
22 line.

23 But we're estimated marginal values for
24 the costs, if you will, because value has many
25 meanings. And I -- I think I can probably follow you

1 and if I get confused, I'll let you know.

2 MS. DAYNA STEINFELD: Okay, thank you.
3 I appreciate that and I'll do the same in return.

4 Marginal cost is important in the rate-
5 making process to achieve economic efficiency; is that
6 correct?

7 MR. PAUL CHERNICK: Yes, that's sort
8 of a highfalutin way of saying it. It's to give price
9 signals that encourage people to do what makes sense
10 economically.

11 MS. DAYNA STEINFELD: And maybe I'll
12 ask you to tell me if this is a less highfaluting way
13 of saying it. Kristen, if we could put up PUB Exhibit
14 42-5 which is Volume 5 of Board counsels' book of
15 documents. At page 67, please. And if we can just
16 scroll down to number 4.

17 What we have here is Manitoba Hydro's
18 list from their application of their general
19 ratemaking objectives and number 4 is efficiency and
20 I'll just read it for the record. It says:

21 "Manitoba Hydro views this goal in
22 designing rates as the need to
23 provide appropriate price signals
24 regarding the value of energy and to
25 promote the efficient and economic

1 use of energy. The determination of
2 an appropriate price signal may
3 recognize the application of
4 marginal cost considerations."

5 Is -- is that a fair way to describe
6 the principle of efficiency?

7 MR. PAUL CHERNICK: Yes, I'm -- I
8 think that's what I was trying to say.

9 MS. DAYNA STEINFELD: Okay, thank you.
10 And, Mr. Chernick, is the efficiency principle in your
11 view more important than other rate-making principles?

12 MR. PAUL CHERNICK: I don't know that
13 you can say that it's more important. You're dealing
14 with real people and real businesses and so there lots
15 of -- of trade-offs in terms of burdens and ability to
16 pay and stability for -- for Hydro's finances and
17 Point 6 on this slide, simplicity and
18 understandability, stability and gradualism, all these
19 are -- are important considerations. And I don't know
20 that you can -- you can rank them in terms of this
21 one's the most important and it always beats the
22 others.

23 MS. DAYNA STEINFELD: And so it would
24 be appropriate for the Board to look at this list of
25 Manitoba Hydro's rate-making objectives and perhaps

1 other accepted rate-making objectives and weigh and
2 balance them in their deliberations?

3 MR. PAUL CHERNICK: To the extent that
4 there's -- there's conflicts in a -- in a decision.
5 For example, the -- the size of the -- a discounted
6 first block for low-income customers. If you make
7 that larger covering more kilowatt hours, there are
8 more customers who are not going to be seeing the tail
9 block rate and who are getting a lower efficiency
10 incentive.

11 You can trade that off against the
12 extent to which you are trying to help those customers
13 and perhaps a little bit less efficiency and a little
14 bit more equity in society is a worthwhile trade-off.

15 This is not something that comes from a
16 list of considerations in Bonbright or anyplace else.
17 These are basically common sense concerns of -- you
18 know, efficiency I guess is a technical one but the
19 rest of them I think are -- are pretty much self --
20 self-evident that there is a concern arises and then
21 you need to -- to figure out whether that concern's
22 actually large enough to -- to affect your decision.

23 MS. DAYNA STEINFELD: Okay, thank you.
24 And we -- we may come back to that with some specific
25 examples in a bit here but you've testified before

1 this Board previously?

2 MR. PAUL CHERNICK: I have.

3 MS. DAYNA STEINFELD: And would you
4 agree that historically or in the recent past,
5 Manitoba Hydro has not focused on marginal cost in its
6 rate design?

7 MR. PAUL CHERNICK: I think that's a
8 correct statement.

9 MS. DAYNA STEINFELD: Could you
10 explain then, Mr. Chernick, why at this time, Manitoba
11 Hydro's rates should be designed using marginal cost
12 when in the recent past it has not been a predominant
13 factor?

14 MR. PAUL CHERNICK: Well, I tried to
15 get -- to move along the process of conservation rates
16 a couple of GRAs back, and I don't remember whether we
17 actually did the marginal cost comparisons or whether
18 it was just obvious that marginal costs at that time
19 were considerably higher than the tail block rates,
20 and therefore, it made sense to raise the -- the rate
21 for -- the tail block rate for residential customers.

22 We didn't have a specific proposal for
23 mitigating the effect on heating customers and the
24 Board decided to back off on the conservation rates at
25 that point.

1 Marginal cost analysis in any detail
2 really matters in this case only for residential
3 customers. Otherwise, the tail block energy rates for
4 all the classes are well below anything that could be
5 the marginal cost. And, as in the past, it's not
6 worth a whole lot of fine-tuning of a marginal cost
7 number that's -- that's well above your tail block
8 rate. You -- the direction is clear that you should
9 be increasing the energy rates to give better
10 incentives for energy conservation.

11 MS. DAYNA STEINFELD: And so is that
12 answer, Mr. Chernick, that we've been talking -- this
13 Board has been talking about conservation rates for
14 some time and now is the time because we've waited
15 long enough. Is that the idea?

16 MR. PAUL CHERNICK: Well, I -- I would
17 say that's part of it, but also back when you were
18 talking about very high export prices and lower retail
19 rates, you didn't have to do much analysis to know
20 that your retail rate -- your energy rate was well
21 below the -- the marginal cost; that was not something
22 that -- that required a lot of -- of discussion.

23 The situation has changed now and --
24 and at least residential ratepayers, that's now a fact
25 that is in dispute.

1 MS. DAYNA STEINFELD: Isn't it -- oh,
2 sorry, Mr. Chernick.

3 MR. PAUL CHERNICK: Am I -- am I -- I
4 just want to make sure, is -- do you understand what
5 I'm -- what I'm saying there about why it really
6 didn't matter much what the marginal -- I mean, the
7 marginal cost was clearly a high number, and whatever
8 we did in terms of an inclining block rate, for
9 example, or moving from demand charges to energy
10 charges would move us in the right direction.

11 We weren't -- there wasn't much
12 question about that now. But now there is a little
13 bit for residential.

14 MS. DAYNA STEINFELD: I think I have
15 your point on that, Mr. Chernick, but isn't it also
16 true that now we're talking about proposed rate
17 increases in the amount of 7.9 percent and that in and
18 of itself will bring about a conservation response?

19 MR. PAUL CHERNICK: Yes, that would in
20 -- tend to -- to improve the economics of -- of
21 efficiency investments and to in -- the higher rates
22 would encourage people to -- to be more careful in
23 their energy use.

24 MS. DAYNA STEINFELD: And do you have
25 a view, Mr. Chernick, on -- on how much additional

1 conservation response could be achieved through
2 layering a tail block on top of a 7.9 percent
3 increase?

4 MR. PAUL CHERNICK: I haven't done the
5 calculations of -- but it's -- I don't think you're --
6 you're running out of opportunities to encourage the
7 efficient use of electricity; that even with these
8 proposed increases Manitoba Hydro's rates will be low
9 by North American standards. And there's plenty of
10 room for -- for increased efficiency about that.

11 MS. DAYNA STEINFELD: Does that remain
12 the case if Manitoba Hydro is successful in convincing
13 this Board and successive rate applications that its
14 indicative rate proposal should be granted? By that I
15 mean, successive years of 7.9 percent increases for, I
16 think, a total of five (5) years, followed by 4.5
17 percent?

18 MR. PAUL CHERNICK: I'd have to look
19 at that, and obviously make some assumptions about
20 what are -- what happens to other rates in -- in North
21 America and the -- in general inflation. But I don't
22 think you'll be a high-priced jurisdiction at the end
23 of that period.

24 MS. DAYNA STEINFELD: From perhaps a
25 high-level perspective, if we're talking about that

1 indicative rate plan in the context of Manitoba, is
2 there a certain point at which you would reach an
3 inability to achieve an additional conservation
4 response with a tail block rate and those rate --
5 those rate increases?

6 MR. PAUL CHERNICK: I -- I doubt that.
7 I don't -- and I don't -- don't see if -- if that is
8 the case, it would be at a -- at a price point that's
9 well above where you're heading over the next decade
10 or so.

11 MS. DAYNA STEINFELD: Okay and why
12 would you expect that to be the case?

13 MR. PAUL CHERNICK: Because higher
14 prices make more efficiency measures cost-effective,
15 and they make -- in terms of the internal workings of
16 a -- of a person or a family or a business, they make
17 more attention to energy use cost-effective.

18 So whether we're talking about
19 increasing the rate from \$0.08 to \$0.09 or \$0.12 to
20 \$0.13, you're going to be increasing the incentives to
21 do the right thing to make your -- your use of -- of
22 energy more efficient. And I -- I don't see that that
23 stops just because you reached 13 or 14 or \$0.15.

24 MS. DAYNA STEINFELD: Okay. Thank you
25 for that, Mr. Chernick. Let's move on to your

1 evidence on Manitoba Hydro's calculation of the
2 marginal cost. Let's start with what you say about
3 Hydro as marginal generation energy cost methodology.
4 Why is it that you say that Manitoba Hydro does not
5 count for load shapes?

6 MR. PAUL CHERNICK: Well, every place
7 where Hydro has explained how they do the -- the
8 marginal cost calculation, they've said that they
9 assume a hundred percent load factor; they assume a
10 flat load, and the numbers that they're reporting are
11 for that flat load. So basically, I'm taking them at
12 their word on the generation side, because I don't
13 have any background materials on transmission and
14 distribution.

15 I can go from the dollars per kilowatt
16 year value that they report to the cents per kilowatt
17 hour and say, Yes, that's the value you'd get at 100
18 percent load factor, and it would be twice that with a
19 50 percent load factor. So I know that's what they
20 did with transmission and distribution. I just have
21 to take what -- what they say about their marginal
22 generation cost.

23 MS. DAYNA STEINFELD: Do you accept
24 that Manitoba Hydro applies load shape and load
25 factors when transmission and distribution's capacity-

1 based marginal costs are combined on an energy basis
2 with generation's marginal costs to arrive at a cents
3 per kilowatt hour?

4 MR. PAUL CHERNICK: In this
5 proceeding, no, they -- they don't take load factor
6 into account. They -- they use a hundred percent load
7 factor. In the rebuttal, as I understand it, Hydro
8 says, For the purpose of screening DSM, we reflect
9 load factor, and apparently also summer and winter,
10 and -- and some other variations within the energy
11 between capacity and -- and energy for generation, but
12 I don't think there's any indication that they've done
13 it in any of their comparisons for rate design
14 purposes.

15 MS. DAYNA STEINFELD: Okay. Thank
16 you. And you also identify interim information that
17 you say Manitoba Hydro should provide. And I'd like
18 to just walk through that with you just piece by
19 piece. And I don't know that we need to go there, but
20 just for reference, we can put up page 11 of your
21 prefiled testimony, which is page 13 of the PDF of
22 your evidence. And if we can just scroll down, just
23 starting at line 10. That's perfect. Thank you,
24 Kristen.

25 So starting with the Hydro system 12

1 percent planning reserve margin, I understand that
2 that's planning for additional supply in case a
3 generation asset fails. Is that your understanding?

4 MR. PAUL CHERNICK: Yes, and every
5 kilowatt of coincident peak load requires Manitoba
6 Hydro have one point one two (1.12) kilowatts of
7 capacity, and it doesn't appear from anything I've
8 seen that there -- the marginal costs that they've
9 given us for generation take that factor into account,
10 but I can't tell, because they've never explained it.

11 MS. DAYNA STEINFELD: Okay. So let's
12 assume that you're right, that it doesn't take that
13 into account. Why is that a concern? Why -- why
14 should that be looked at in the calculation of
15 marginal cost?

16 MR. PAUL CHERNICK: Well, because if -
17 - if residential load grows, and residential
18 contribution to peak grows, then the capacity that
19 Manitoba Hydro needs to add or to reserve for itself
20 and not sell on a firm basis also grows, and it grows,
21 not kilowatt for kilowatt, but 1.2 kilowatts of -- of
22 capacity delivered to the -- to the common bus for
23 every kilowatt of -- of load at the common bus.

24 MS. DAYNA STEINFELD: And if we go
25 down a bullet to generation capacity cost, given that

1 Manitoba Hydro has said on the record in these
2 proceedings that it no longer includes a premium for
3 capacity in its export price forecast, is -- is this
4 bullet now satisfied, or do you still believe --

5 MR. PAUL CHERNICK: Yes, we -- we know
6 that it -- in -- in terms of the revised marginal
7 cost, we know that they now use just the -- the value
8 of opportunity power.

9 MS. DAYNA STEINFELD: Okay. So we can
10 satisfy that one has now been taken care of?

11 MR. PAUL CHERNICK: You now have an
12 answer for that.

13 MS. DAYNA STEINFELD: So moving on to
14 the third bullet, the projected generation capacity
15 need date assumed -- and the marginal capacity cost,
16 again, could you just explain why that information
17 would matter to the marginal cost calculation?

18 MR. PAUL CHERNICK: Yes, and actually,
19 this is another one where we now have an answer in the
20 -- in -- in the revised version, where they say we
21 assume a -- a Manitoba Hydro peaking unit to be built
22 in 2030. And it matters because we're using a
23 levelized marginal cost, meaning you take the present
24 value of the costs over a long period of time, and you
25 pick a value today, or over, say, thirty (30) years,

1 which, when you present-value it back, will have the
2 same value as this cash flow over many years.

3 Well, if you start that cash flow in
4 2022, you're present-valuing it back -- present-
5 valuing it back only a couple of years to today, but
6 if you started in 2030, or 2035, you present-value it
7 back much more, and you're dividing by -- I forget
8 what discount rate they used, something like one point
9 o-five (1.05) for every year that you've pushed it out
10 into the future, so the -- the price is -- the cost
11 that you are estimating goes down in present value
12 terms as you push the -- the cost into the future.

13 So that's why it matters, but we now
14 know what they're assuming in the revised marginal
15 cost.

16 MS. DAYNA STEINFELD: Okay. And the
17 fourth bullet here, how Manitoba Hydro developed its
18 summer and winter generation capacity cost estimates,
19 and cost per kilowatt, and how these estimates
20 combined to estimate annual capacity cost. Again, why
21 is this information important to the calculation of
22 marginal cost?

23 MR. PAUL CHERNICK: Well, okay. The -
24 - the reason I even mentioned that one is that the --
25 that Manitoba Hydro says that it calculates summer and

1 winter generation capacity cost, and the marginal cost
2 for a rate class, or for that matter, the -- the
3 benefit from a DSM measure depends upon in -- how much
4 the average kilowatt hour affects summer peak and
5 winter peak. And different kinds of classes have
6 different contributions to one (1) or both peaks, and
7 so the cost per kilowatt hour will depend upon the
8 load shape of the class and the summer and winter
9 generation capacity costs that you've estimated. And
10 all of that together give you your class generation
11 capacity cost, if you've done all your calculations
12 right.

13 MS. DAYNA STEINFELD: Okay. Thank you
14 for that, Mr. Chernick. And if we can move onto the
15 issues you've identified with Manitoba Hydro's
16 marginal transmission and distribution cost. And
17 let's start with the exclusion of costs before the
18 planning period.

19 I believe what you said this morning
20 was that Manitoba Hydro's methodology does not include
21 sunk cost, but am I right that it does include sunk
22 load growth?

23 MR. PAUL CHERNICK: Well, it includes
24 the load growth that will be met by the sunk costs, so
25 that the load growth between 2015 and '16, for

1 example, that's in their calculation, but most of the
2 costs of meeting the load growth in 2016 are not in
3 their calculation.

4 MS. DAYNA STEINFELD: So would it
5 address the problem that you identified to exclude
6 both the load growth and the load --

7 MR. PAUL CHERNICK: You could scale
8 down the --

9 MS. DAYNA STEINFELD: -- sorry, and
10 the project costs?

11 MR. PAUL CHERNICK: -- the load growth
12 to -- to do that. It's much more straightforward to
13 simply include the costs, because the -- the sunk
14 costs, because that's something that the -- the
15 Company tracks for its -- in its T & D budgets. So
16 you've got all that -- those data available very
17 easily, and that's a more straightforward way of doing
18 it. But yes, you could adjust the formula in other
19 ways.

20 MS. DAYNA STEINFELD: And in terms of
21 -- you went this morning through some detail around
22 the inclusion of transmission and distribution
23 projects in the later years of the planning period.
24 Can you again explain why that matters when we're
25 calculating marginal cost?

1 MR. PAUL CHERNICK: Yes. In general,
2 a utility will have a pretty good sense, given its
3 current load forecast, what it will need to build and
4 how much it will cost to meet its requirements, load
5 growth, in the next, say, five (5) years. And there
6 some utilities that are very serious about doing
7 longer-term planning, but those tend to be, for
8 example, Consolidated Edison in New York, where doing
9 anything takes ten (10) years. So they look way out.

10 But it -- a more normal utility like
11 Manitoba Hydro, I would expect them to have a pretty
12 detailed plan for the next three (3) years, and a
13 pretty -- and a -- at least placeholders for the
14 things they are expecting for five (5) years, because
15 for transmission, you have to acquire rights-of-way,
16 and you have -- have to do environmental permitting,
17 and so you have to know what you're going to do, and
18 along the way, you develop your -- your capital.

19 But beyond about five (5) years, you
20 generally don't have a very good idea, and you either
21 -- you -- you have a number of ways of dealing with
22 this. You can just use the five (5) years and say,
23 This is what we got, and just base your estimates on
24 that. Many utilities also use some historical period
25 for which they have actual data of the cost of the

1 facilities that came on line in each year and the load
2 growth in each year. So then you'd get your ten (10)
3 years, but maybe five (5) years historical, or five
4 (5) years forecast.

5 Or you can say, Well, we've got five
6 (5) years, and then we've got probably half of our
7 projects for the next three (3) years. So we'll bump
8 that up by a factor of two (2), because -- to take
9 into account what we haven't seen before. And maybe
10 you look back at your past forecasting efforts, and I
11 -- I mentioned this a little bit, and just look at how
12 much your budget has increased over a period of years,
13 say your budget for 2017. What was that back in 2012?
14 What is it in 2016? And then say, Okay, so our load
15 forecast went down by 20 percent, but our budget went
16 up by 20 percent, so we'll -- we'll add 50 percent in
17 when we're looking four (4) years out, because that's
18 about how wrong we been in the past, or how much we --
19 not even necessarily wrong. We just haven't
20 identified everything.

21 You -- you know, if you look at your
22 household budget, or the budget for running the Board,
23 you may have a pretty good idea of what equipment you
24 need to replace next year, what special projects
25 you're going to have to do, what staff you need to

1 hire, but when you look out five (5) years, well, who
2 knows. I guess maybe Manitoba Hydro has made easier
3 by laying out their -- their rate file trajectory for
4 you, but in general, as you get further out, you just
5 don't know as much what's going to happen, and
6 therefore, you have to put in a placeholder or just
7 ignore those years -- in-use years for which you've
8 got reasonably complete data.

9 And I'm -- I forget what your original
10 question was.

11 MS. DAYNA STEINFELD: That's okay,
12 because I think you've answered it, but I'm going to
13 follow up and say I think you've identified -- I heard
14 three (3) options for how you would come up with a
15 placeholder for those years after the -- the five (5)
16 years. Is there a -- a best practice, or a -- a Mr.
17 Chernick-recommended methodology?

18 MR. PAUL CHERNICK: No. I -- this is
19 -- this really depends on what kinds of information
20 the Utility has, and on -- on your history and your
21 situation. If, for example, you massively over bill
22 your transmission and distribution in the last few
23 years, and then had a big drop in load, then using
24 your ten (10) year forecast, even if you had a good
25 one, would tend to underestimate your real needs,

1 certainly using your five (5) year forecast, because
2 you've already built most of what you need in the next
3 five (5) years.

4 So you have to look at your situation
5 and see whether -- are we playing catch-up, are we in
6 a -- an unusually long position, and apply some common
7 sense to -- to the decision. And some utilities have
8 enough data that they've got a number of choices, and
9 some really have good historical data in a forecast
10 for three (3) years, and that's about all they have to
11 work with.

12 MS. DAYNA STEINFELD: And right now,
13 Manitoba Hydro is doing something on the transmission
14 side, but nothing on the distribution side, so
15 something would be better than nothing? Is that the -
16 - the point we should take away, here?

17 MR. PAUL CHERNICK: Well, that's true,
18 and doing more would be better. And if you have
19 historical data and there's no reason to think that
20 it's unrepresentative, then perhaps you should use
21 some historical -- you know, ten (10) years of
22 history, five (5) years of forecast. If you've got
23 some unusual projects that you know you are not going
24 to -- nothing like those are going to come up again --
25 you -- you wouldn't include Bipole III in this

1 analysis, for example. That's off in major projects
2 anyway.

3 So there are a number of ways of
4 approaching it, but yeah, you should do something.
5 And if you can come up with a -- a presentation that
6 really includes all the load growth and all of the --
7 the cost to meet it, that would be great.

8 MS. DAYNA STEINFELD: Another issue
9 that you've identified, Mr. Chernick, is around costs
10 that Manitoba Hydro has categorized as being related
11 to outages, or removal of aging assets that -- that
12 you say are load related and should be included in the
13 marginal cost calculation. Is -- is that correct?

14 MR. PAUL CHERNICK: Yes, and here
15 we're getting down in the weeds of individual
16 projects, so --

17 MS. DAYNA STEINFELD: I'll try to stay
18 out of the -- the weeds.

19 MR. PAUL CHERNICK: You go where you
20 want to go.

21 MS. DAYNA STEINFELD: I'll try to stay
22 out of the weeds. You've taken me there a little bit
23 in your evidence, but we'll do what we can.

24 Would you accept that, broadly
25 speaking, any expense can be considered load related?

1 MR. PAUL CHERNICK: Well, not -- not
2 really, certainly not on a marginal basis. I guess if
3 Manitoba Hydro had no domestic load, it wouldn't have
4 any distribution costs at all. But if you have a
5 substation that needs to be relocated because you had
6 a forty (40) year lease on the land, and the owner
7 wants the land back, that's got nothing to do with
8 your load. That whole expense of relocating, it is --
9 is non-load related.

10 If you decide to double the size of
11 substation because you're expecting load growth, then
12 that incremental cost would be load related. If a
13 piece of -- distribution feeder has old poles that are
14 beginning to rot away, and -- and lines that have, you
15 know, broken in storms over the year, and been spli --
16 years, and been spliced multiple times, it's -- may
17 just be time to replace it.

18 And again, it has nothing -- you could
19 cut your load on that feeder in half and still have to
20 do exactly the same thing. So there are projects that
21 are clearly not load related for marginal cost
22 purposes, and there are others that are -- that are
23 entirely load related, and some that are in between.

24 MS. DAYNA STEINFELD: And Mr.
25 Chernick, you've given me some examples to -- to

1 illustrate the point, but is there a brief explanation
2 as to how you draw the line between projects that are
3 reliability related, and those that are load related,
4 or is it a matter of judgment on a project-by-project
5 basis?

6 MR. PAUL CHERNICK: You -- you have to
7 look at -- at the -- the justification for the
8 project, and many of them are very easy. We've got
9 overloads in this area coming up; we need to build a
10 new substation. That's load related. This equipment
11 is falling apart; it needs to be replaced. That's not
12 load related. And then there are the ones where
13 you're sort of combining those things, that we need to
14 replace this, and while we replace it, we upgrade it,
15 and then you have to break it down.

16 MS. DAYNA STEINFELD: Isn't it the
17 case, though, that sometimes you do a project to fix a
18 reliability problem, but that reliability problem is
19 related to load growth?

20 MR. PAUL CHERNICK: Well, then, I
21 would consider it a load related problem, that -- the
22 mere fact that you're getting low reliability, if it's
23 due to loading, then that makes the -- the fix load
24 related. If your -- your low reliability has to do
25 with the fact that the equipment is old and the lines

1 are just breaking in high winds, then that's not load
2 related, so it -- yet -- you can't just look at
3 category like reliability and tell immediately whether
4 that's load related or not. You have to look at what
5 kind of problem is driving the addition.

6 MS. DAYNA STEINFELD: Kristen, could
7 we put up Mr. Chernick's slide 21, please.

8

9 (BRIEF PAUSE)

10

11 MS. DAYNA STEINFELD: Mr. Chernick,
12 would you agree with me, subject to check, that the
13 current residential energy charge is eight point one-
14 nine-six (8.196) cents per kilowatt hour?

15 MR. PAUL CHERNICK: That sounds right.

16 MS. DAYNA STEINFELD: And this chart
17 you provided in your evidence from this morning just
18 helpfully lays out the original filed marginal cost by
19 Manitoba Hydro, and the values in the revised version.
20 So you'll -- you'll accept that the revised Manitoba
21 Hydro marginal cost for the residential class is five
22 point seven-five (5.75), if we're rounding?

23 MR. PAUL CHERNICK: Yes.

24 MS. DAYNA STEINFELD: Isn't it the
25 case that the existing residential energy charge is

1 above the marginal cost as it is, and therefore
2 already sends customers the appropriate price signal?

3 MR. PAUL CHERNICK: Well, if you
4 believe that Manitoba Hydro's marginal cost summary
5 were correct, that -- that is the conclusion you'd
6 reach. But again, you've got problems as simple as
7 the hundred percent load factor assumption for a class
8 with a less than 50 percent load factor, and a bunch
9 of other things that I've pointed at.

10 MS. DAYNA STEINFELD: So what you're
11 telling the Board is that if you do the math, or the
12 methodology the correct way, then in fact, the
13 marginal cost is above the current residential energy
14 rate.

15 MR. PAUL CHERNICK: That's correct.

16 MS. DAYNA STEINFELD: Okay. Thank
17 you. And in your evidence you've provided, as we see
18 in an alt -- alternate marginal cost calculation, and
19 -- and this is based on the transmission and
20 distribution marginal costs, because you didn't have
21 access to the --

22 MR. PAUL CHERNICK: And including the
23 environmental costs.

24 MS. DAYNA STEINFELD: But you didn't
25 have access to the generation --

1 MR. PAUL CHERNICK: That's correct.

2 MS. DAYNA STEINFELD: -- marginal
3 values, so you've focussed on transmission and
4 distribution? Okay.

5 And if we can just walk through in a
6 general sense the process of your methodology, what
7 you've done is you've taken the transmission and
8 distribution marginal costs, and you've divided it by
9 class load factors. Is that right?

10 MR. PAUL CHERNICK: Yes, and -- and
11 I've -- I've also increased the dollars per MR. KEVIN
12 WILLIAMS: value estimated by Manitoba Hydro for other
13 corrections that I identified. For example, using the
14 wrong load factor -- excuse me, using the wrong load
15 growth for the distribution that -- assuming that all
16 load growth was at distribution level, and using --
17 and -- and excluding some costs such as the sunk costs
18 that we were talking about that should have been
19 included. So I made those corrections, and then
20 adjusted for load factor and added up the pieces.

21 MS. DAYNA STEINFELD: And those
22 corrections that you're referring to are the -- the 20
23 percent increase that you've brought in to reflect the
24 increase on the percentage of projects that you say
25 are load related?

1 MR. PAUL CHERNICK: That would be one
2 (1) of them, yes.

3 MS. DAYNA STEINFELD: And the other is
4 a 6 percent addition to reflect pre-2016 expenditures?

5 MR. PAUL CHERNICK: Yes, about that.

6 MS. DAYNA STEINFELD: You spent some
7 time already speaking with Ms. Fernandes and others
8 about the externalities adder. But at a -- at a high
9 level, why include externalities in -- in the
10 calculation of marginal cost? And I -- and maybe I'll
11 put that another way.

12 As I understand it, these aren't costs
13 that Manitoba Hydro would incur for an additional
14 increment of load, or a cost that would be avoided for
15 a decrement of load. Is that right?

16 MR. PAUL CHERNICK: Well -- okay. It
17 gets complicated. If they're solely externalities,
18 then -- then that's true that nobody is -- Manitoba
19 Hydro isn't paying that cost directly. If it's a
20 matter of Saskatchewan facing those prices and paying
21 more for an import of power from Manitoba, then it is
22 relevant. It's a -- it's not just relevant, but it's
23 -- it's a real cash flow item for Manitoba Hydro.

24 So depending upon the situation, it's
25 either a -- a increase of costs to Manitoba Hydro, or

1 it's just -- it's an increase of costs to society.

2 It's a value that the federal government has placed on
3 the emission of carbon.

4 MS. DAYNA STEINFELD: So if I rephrase
5 that, would it be right to say that externalities are
6 real costs, or have a real value, but they're not
7 included in the initial assessment because they're
8 essentially a step removed?

9 MR. PAUL CHERNICK: Well, by
10 definition, an externality is a -- a cost that's not
11 paid by the -- the participants in a transaction; in
12 this case, not by Manitoba Hydro or its customers in
13 the tra -- the transaction of their buying power. Can
14 we take a short break?

15 MS. DAYNA STEINFELD: Mr. Chair, could
16 we -- the witness would like to take a short break, if
17 that's all right.

18 THE CHAIRPERSON: Take ten (10)
19 minutes.

20

21 --- Upon recessing at 3:40 p.m.

22 --- Upon resuming at 3:49 p.m.

23

24 THE CHAIRPERSON: Ms. Steinfeld...?

25

1 CONTINUED BY MS. DAYNA STEINFELD:

2 MS. DAYNA STEINFELD: Now, Mr.
3 Chernick, I just have a few more questions on
4 externalities. You mentioned I think to Dr. Williams
5 that these are largely externalities related to
6 displacing coal and gas load in the MISO market;
7 correct?

8 MR. PAUL CHERNICK: Yes.

9 MS. DAYNA STEINFELD: In calculating
10 the marginal cost or marginal value, should the Board
11 consider the value to Manitoba Hydro or to Manitobans?

12 MR. PAUL CHERNICK: I'm interpreting
13 your question as: Should the Board ignore the broader
14 social benefits of carbon reductions in --

15 MS. DAYNA STEINFELD: Well, that might
16 be putting words in my mouth a little bit but from
17 what I understand --

18 MR. PAUL CHERNICK: I don't mean to do
19 that.

20 MS. DAYNA STEINFELD: That's -- that's
21 all right, I'm going to try and put words in your
22 mouth.

23 What I understand is we're largely not
24 talking about displacing carbon or natural gas in
25 Manitoba, we're talking about displacement elsewhere.

1 MR. PAUL CHERNICK: Right.

2 MS. DAYNA STEINFELD: So my the
3 question to you is: What's the value to either
4 Manitoba as a province or Manitoba Hydro as a Utility
5 when we're talking about those displacements in other
6 countries?

7 MR. PAUL CHERNICK: Well, whether it's
8 other -- other countries or another province, the
9 benefit to Manitoba is of reducing carbon emissions to
10 the same regardless of whether you're reducing
11 emissions in Minnesota or Iowa or Saskatchewan or in
12 Manitoba because we're concerned here about a -- a
13 global atmospheric concentration of carbon dioxide not
14 the -- not where it's coming from. You're not --
15 you're not poisoning people locally when -- when you
16 run your gas plants here.

17 We're not doing Minnesota favour
18 particularly by exporting power to them and -- and
19 letting them turn down their -- their coal plants.
20 It's a -- a benefit to -- to everybody and the
21 government's put a value on that and said we should be
22 willing to pay up to this much to get that value and
23 logically there's no reason to have a different value
24 for reductions in Manitoba as opposed to in
25 Saskatchewan or in Minnesota. It's all going the same

1 place.

2 MS. DAYNA STEINFELD: So if we're
3 talking largely about emissions that are being
4 displaced in the U.S., why not use an American
5 omissions valve?

6 MR. PAUL CHERNICK: The benefits of
7 carbon reduction assessed by the Canadian government
8 are considerably higher than those assessed by the
9 current US administration.

10 I think the Canadian government is --
11 has a more defensible position on those numbers;
12 that's Canadian public policy and it make sense to me
13 to -- to view it through that lens. If you were only
14 concerned about the financial implications for --
15 directly for Manitoba Hydro and the rest of the
16 province, then you would only want to include the
17 price that the Utility you're selling to would reflect
18 in the prices it's willing to pay; whether that's to
19 Minnesota or Saskatchewan, there'd be different
20 values.

21 But if you're -- you're looking at it
22 in terms of the reason that the government set those
23 prices in the first place, then you'd want to include
24 it at -- at all reductions at those values.

25 MS. DAYNA STEINFELD: Shouldn't we

1 then be looking at the propose Manitoba value for
2 carbon; \$25 as opposed to the federal 50?

3 MR. PAUL CHERNICK: That's -- that's a
4 policy issue that I -- I did -- didn't consider about
5 how the Manitoba values and the federal values
6 interact, and I'm sorry that I'm not in a very good
7 position to talk about it.

8 MS. DAYNA STEINFELD: Fair -- fair
9 enough, Mr. Chernick. Let's maybe leave marginal cost
10 for now unless other exciting questions come to me.

11 MR. PAUL CHERNICK: But I'm happy to
12 talk about it some more if you really want but...

13 MS. DAYNA STEINFELD: Let's turn to
14 your rate design and this has been canvassed already
15 but just to refresh our memories. Maybe I'll use book
16 of documents, Volume 5, PUB-42-5, starting at page
17 125, please, Kristen. And if we just scroll down to
18 the bottom.

19 Mr. Chernick, this is the table 6 from
20 your pre-filed testimony; correct?

21 MR. PAUL CHERNICK: Yes.

22 MS. DAYNA STEINFELD: And you've
23 already explained this but just to remind us, this
24 table includes a 7.9 percent increase applied to
25 August 2016 rates but does not include the actual 3-3-

1 6 percent that was granted and the further proposed
2 7.9 percent; is that correct?

3 MR. PAUL CHERNICK: Right. So it's --
4 it's in between the currently set rates and what had
5 been requested.

6 MS. DAYNA STEINFELD: And if we turn
7 to page 128 of this volume. And again, just scroll
8 down to the highlighting.

9 This version of your rate design shows
10 the 3.36 percent applied to the August 1st, 2016 rates
11 but does not include the additional 7.9 percent
12 that's proposed for April 1st, 2018?

13 MR. PAUL CHERNICK: That's correct.

14 MS. DAYNA STEINFELD: So, in other
15 words, if we look at this version, this is based on
16 the current approved rates, including the two (2)
17 interim rates?

18 MR. PAUL CHERNICK: That's -- that's
19 correct.

20 MS. DAYNA STEINFELD: And again, if --
21 if we can step back to a high level just I understand
22 your rate design proposal, the existing residential
23 rate structure has four (4) subcategories: basic,
24 residential seasonal, residential diesel and flat-rate
25 water heating; correct?

1 MR. PAUL CHERNICK: Yes.

2 MS. DAYNA STEINFELD: And your
3 proposal establishes new subcategories for residential
4 customers and we see those laid out here, correct?

5 MR. PAUL CHERNICK: Yes.

6 MS. DAYNA STEINFELD: And when we're
7 talking about these news subcategories, are we just
8 dividing up the residential basic customers?

9 MR. PAUL CHERNICK: That was my
10 intent. I -- I assumed that the seasonal customers
11 would be treated like the basic customers except for
12 the fact that they're -- they're billed the basic
13 charge on an annual basis, but I -- I didn't get it --
14 get to the -- the -- the point of dealing with the --
15 the diesel customers for example.

16 MS. DAYNA STEINFELD: Okay, so we'll
17 essentially look at your rate design proposal leaving
18 aside the diesel and the flat rate water heating
19 customers.

20 MR. PAUL CHERNICK: Right.

21 MS. DAYNA STEINFELD: Okay, thank you.
22 And we've spent some time already today talking about
23 the -- the discount and -- and you've arrived at a
24 \$.04 cent discount for the first block.

25 And am I right in understanding that

1 your evidence is that the \$.04 cents is essentially a
2 matter of judgment?

3 MR. PAUL CHERNICK: Yes.

4 MS. DAYNA STEINFELD: Why did you
5 initially select \$.04 cents?

6 MR. PAUL CHERNICK: Well, I looked at
7 it in terms of wanting to have a substantial benefit
8 for -- of starting with low income customers. I
9 wanted to have a substantial benefit for that group of
10 customers, but I didn't want the rate to get so low
11 that electricity was essentially free. I think that
12 even for the small number of customers who are in that
13 first block.

14 So that's the sort of trade-off that
15 you -- you get into how low is too low. How much of a
16 reduction is enough. I believe when I originally did
17 this I tried some different numbers. Four hundred
18 (400) seemed to be -- excuse me, \$.04 cent discount
19 what seemed to be a large enough discount to -- to be
20 meaningful. The -- the rate of over \$.04 cents, four
21 and a half cents in my original version, seemed to be
22 high enough that you weren't giving away electricity
23 and -- and providing a confusing signal to customers.

24 But as you've said, it's a matter of
25 judgment.

1 MS. DAYNA STEINFELD: And the
2 interblock differential that you've selected in this
3 rate design is not linked to marginal costs; is that
4 correct?

5 MR. PAUL CHERNICK: That's correct.

6 MS. DAYNA STEINFELD: If the Board
7 were to accept your rate proposal and order one (1)
8 aspect of it or all aspects of it, what should the
9 size of the discount be?

10 MR. PAUL CHERNICK: Are you asking
11 whether I'm happy with my \$.04 cent value?

12 MS. DAYNA STEINFELD: I suppose that's
13 the way I would rephrase it, yes.

14 MR. PAUL CHERNICK: Okay. I'm happy
15 with the \$.04 cents. If the Board said, we don't --
16 we are not comfortable with the -- the magnitude of
17 the effect on other customers. We want to -- we're
18 going to do it at \$.03 cents, I can't say that's a --
19 a bad decision. Again, this is a matter of judgment,
20 and that's ultimately the Board's job. I think the
21 \$.04 cents is reasonable, but it could be higher or
22 lower.

23 MS. DAYNA STEINFELD: Does Manitoba
24 Hydro have to study this further before the Board is
25 in a position to arrive at a discount amount?

1 MR. PAUL CHERNICK: I'm not sure what
2 more Manitoba Hydro would need to study. Manitoba
3 Hydro would have to come up with its estimate of the
4 rate increase based on an estimate of the -- the
5 uptake, the participation in the program and perhaps
6 fine-tuning my estimates of the -- the number of
7 kilowatt hours in the program and out of the program.

8 So Manitoba Hydro would have to -- to
9 redo those numbers for its -- the numbers at the
10 bottom of this table for its compliance filing and, as
11 I've noted, if they find that I've made a mistake in
12 my calculations or that my data were not current and
13 the results are substantially different, they could
14 certainly apply to the Board for a variance in the
15 decision to, as I said before, tweak the -- the
16 numbers to deal with whatever problem they fine.

17 MS. DAYNA STEINFELD: Would you accept
18 then, Mr. Chernick, that given what you told Dr.
19 Williams earlier about not having done any customer
20 engagement around your rate design that further study
21 would be required to meet the public acceptability
22 principle of ratemaking?

23 MR. PAUL CHERNICK: I don't believe
24 so. I -- I don't think that the public acceptability
25 standard is usually applied to mean that you need to

1 canvass the public about what it thinks.

2 If you look at this in terms of we're
3 going to help out low income customers by giving them
4 a limited amount of energy at a lower price and not
5 charging the fixed charge so that their bills are
6 somewhat lower and they're able to live a better life
7 or just pay their bills on time, I guess it's the
8 Board's decision as to whether that is socially
9 acceptable. And from what I know of Canada and
10 Manitoba I think that's likely to be a highly
11 acceptable concept.

12 Now that -- I certainly don't want to
13 suggest that nobody will take exception to their bills
14 being raised even a penny to help somebody else but I
15 don't think you have to look back at the -- at
16 customer surveys to determine whether it's socially
17 acceptable.

18 THE CHAIRPERSON: Sorry, can I
19 interrupt with a question based on that.

20 What happens if it's a different
21 situation where you have businesses saying, we need
22 discounts in order to be competitive and that results
23 in potentially raising residential rates? Does it
24 apply there as well?

25 MR. PAUL CHERNICK: Again, I don't

1 think that this Board or regulators in other
2 jurisdictions need to survey the public about what
3 they want to do. If -- if the legislature wanted to
4 have a referendum on every Manitoba Hydro rate
5 increase, they could have required that.

6 It is your job to look at it and say,
7 Is this socially acceptable? Is given the -- the
8 economic climate in the -- in the province, are
9 customers, in general, is the public in general going
10 to think of this once that they get used to the idea
11 that we've done it, think of this as being a worthy
12 endeavour. That they pay a little bit more to keep a
13 major employer in the province; to help a vulnerable
14 industry through a tough period.

15 And if you believe that to be the case,
16 then you should do it. If you think that people are
17 going to think this is the dumbest thing they've ever
18 seen, and they will continue to think that five (5)
19 years down the road then you probably shouldn't do it.

20 THE CHAIRPERSON: So it -- when
21 Bonbright writes this so we keep getting referred to
22 the -- all those points and they talk about public
23 acceptability for rate design, then it's what the
24 Board thinks is publicly acceptable?

25 MR. PAUL CHERNICK: I'm sure that

1 Bonbright was not expecting there to be extensive
2 engagement with customers in -- when he was writing
3 that in the -- in the '40s or whatever it was.

4 THE CHAIRPERSON: Yes. Okay, thank
5 you. Sorry, Ms. Steinfeld?

6

7 CONTINUED BY MS. DAYNA STEINFELD:

8 MS. DAYNA STEINFELD: Thank you, Mr.
9 Chair. Mr. Chernick, I'll -- I'll move on. I want to
10 briefly touch on something that Mr. Monnin discussed
11 with you. You confirmed to him that your account lost
12 revenue estimates are just that, they're estimates?

13 MR. PAUL CHERNICK: Yes.

14 MS. DAYNA STEINFELD: Your estimates
15 of loss revenues do not account for any program
16 administration costs; correct?

17 MR. PAUL CHERNICK: That's correct.

18 MS. DAYNA STEINFELD: Thank you. And
19 in terms of the recovery rates if the Board
20 implemented all aspects of your proposal, then they
21 would have to take the recovery rates and add them
22 together, correct?

23 MR. PAUL CHERNICK: Yes, and that
24 would -- they'd be different for different groups,
25 depending on how you did it.

1 MS. DAYNA STEINFELD: So if the Board
2 did the LICO-125 All rate design and the non-LICO
3 electric standard heating rate design, you would add
4 those to recovery rates that we see here together to
5 get the total recovery rate to keep the Utility whole?

6 MR. PAUL CHERNICK: Yes.

7 MS. DAYNA STEINFELD: I'll turn to
8 page 132. I don't need -- know that we need to scroll
9 through this but just so we have it.

10 This is excerpted from Manitoba Hydro-
11 GAC-1-10(b) attachment. And what we're looking at
12 essentially are the bill impacts.

13 Is that your understanding?

14 MR. PAUL CHERNICK: Yes.

15 MS. DAYNA STEINFELD: And can you
16 confirm, perhaps subject to check, that where we end
17 up with this is that the bill impacts range from
18 negative 68.1 percent to plus 17.1 percent.

19 Does that sound about right?

20 MR. PAUL CHERNICK: I -- through the
21 various groups of customers and assuming that the
22 costs are recovered entirely through the residential
23 class, yes.

24 MS. DAYNA STEINFELD: And the starting
25 point for this analysis is the August 2016 rates,

1 correct?

2 MR. PAUL CHERNICK: Yes.

3 MS. DAYNA STEINFELD: So the bill
4 impacts that you've calculated do not include the
5 requested 7.9 percent rate increase?

6 MR. PAUL CHERNICK: That's correct.
7 This is just for the change in the rate design as a
8 separate step.

9 MS. DAYNA STEINFELD: So if we take
10 the extreme -- if -- if you'll accept that I'm right
11 about the upper limit being a 17.1 percent increase,
12 you'd have to add 7.9 percent to that?

13 MR. PAUL CHERNICK: Yes, roughly
14 speaking.

15 MS. DAYNA STEINFELD: And you may
16 have already answered this but just so I'm clear, does
17 this calculation include the impact of the recovery
18 rates?

19 MR. PAUL CHERNICK: Yes.

20 MS. DAYNA STEINFELD: And --

21 MR. PAUL CHERNICK: They're in the
22 particular slide that we're looking at. We don't have
23 any recovery because this is the group that we're
24 reducing rates for but, yes, for the -- the general
25 residential it includes the recovery rate.

1 MS. DAYNA STEINFELD: And with that in
2 mind, Mr. Chernick, is it practical to implement this
3 rate design now in the context of the level of the
4 rate being sought by Manitoba Hydro?

5 MR. PAUL CHERNICK: Well, that's a
6 decision that the Board would have to make as its --
7 when it decides how large the rate increase is going
8 to be overall. And then to -- and also in the context
9 of whether the recovery will be entirely from the
10 residential class or spread out over all the classes.

11 And then if the Board says we're going
12 to have some large residential customers who are just
13 going to be seeing too large of an increase and,
14 therefore, we are going to have a -- instead of a \$.04
15 cent discount, we'll have a \$.03 cent discount and
16 instead of the -- the roughly four and a half mil
17 increase in -- from the first block to the second
18 block that I've proposed here for the inclining block
19 rate; maybe we'll have two (2) mils the first year,
20 and phase it in over a series of years.

21 So I would say that from the Board's
22 perspective, the first question is: Do you want to go
23 down these road that I've laid out? Do you like all
24 of them, any of them, some mix of them? And if so,
25 then you do the rest of your calculations and you ask,

1 well, and how much of this do we want to do at the
2 same time that we're having that rate increase. And
3 you may want to stretch it out over a number of years.

4 And some of the concerns about the low
5 income and how long it takes to get people enrolled,
6 those would be ameliorated if you were starting with a
7 small -- lower discount and gradually ramping it up,
8 so that there's a reason for people to sign up right
9 away but if they don't sign up right away, they're not
10 too bad off.

11 So ultimately, this is not an answer --
12 a question that I can answer. This is a question that
13 the Board has to answer in its infinite wisdom.

14 MS. DAYNA STEINFELD: And when the
15 Board is looking at that question and considering bill
16 impacts of -- of your proposed rate design and matters
17 of affordability, is another option to address those
18 concerns to simply do it at the level of the rate
19 increase?

20 Do you get where you want to go by
21 granting less than 7.9 percent of an increase?

22 MR. PAUL CHERNICK: Well, I -- I was
23 assuming that the Board would be granting the level of
24 rate increase that it thought necessary to maintain
25 the financial stability of Manitoba Hydro.

1 If there's a range of reasonableness
2 then the -- the Board certainly could say, you know,
3 we could see doing anywhere from 6 to 8 percent
4 increase and 6 is a little lean, but it's probably
5 adequate and 8 percent gives them a little more of a
6 cushion but we'll do it at 6 percent so that we can do
7 some of these other things as well and start the
8 process.

9 That would be a reasonable approach
10 given -- if the facts line up with it and this is
11 something that I don't know off the -- at the moment.

12 MS. DAYNA STEINFELD: And that's where
13 the Board might then look at the different proposals
14 you've put forward and decide what -- what fits in the
15 context of the level of the rate that's being ordered?

16 MR. PAUL CHERNICK: That's right.

17 MS. DAYNA STEINFELD: Thank you. And
18 Kristen, if we could put up -- staying on this PUB-42-
19 5, page 109, please.

20 Your proposal, as we've discussed at
21 some length today, is -- includes assistance for all
22 residential ratepayers that use electric heat; is that
23 correct?

24 MR. PAUL CHERNICK: Yes.

25 MS. DAYNA STEINFELD: And if we look

1 at this document here, what I think we see is that if
2 you break out standard heating customers and all
3 electric residential customers and compare the revenue
4 to cost coverage ratios of those two (2) subclasses of
5 residential customers, the all electric customers are
6 underpaying the cost to serve them as a class; is that
7 correct?

8 MR. PAUL CHERNICK: That's the
9 conclusion of this analysis, yes.

10 MS. DAYNA STEINFELD: And do you agree
11 that if the Board were to order a rate design that
12 assists all electric residential customers, this -- if
13 we want to call it a problem would be further
14 exacerbated?

15 MR. PAUL CHERNICK: Well, if you
16 decide that the all electric customers should pay less
17 than -- than they would on the -- on the standard
18 rate, then you're going to be lowering the revenue you
19 get from them.

20 And the question is: Is that an
21 improvement because these customers need some
22 protection or is it not an improvement because they're
23 already better off than other customers, not in terms
24 of the -- just in terms of the revenue-to-cost ratio
25 but in terms of the -- the cost burden on them.

1 And if the Board is not particularly
2 concerned about the non-low income electric heating
3 customers, then it doesn't have to do anything with
4 those columns by analysis and just worry about low
5 income, or maybe low income and space -- particularly
6 for low income space heating customers and leave the
7 other customers on the standard rate.

8 MS. DAYNA STEINFELD: So, in other
9 words, it's a tool in the Board's toolbox if it
10 decides that it needs to be addressed?

11 MR. PAUL CHERNICK: Exactly.

12 MS. DAYNA STEINFELD: And are you
13 area, Mr. Chernick, of Manitoba Hydro's evidence in
14 this proceeding that winter marginal costs are higher
15 than summer marginal costs?

16 MR. PAUL CHERNICK: Yes, that -- that
17 makes sense certainly for the transmission/
18 distribution costs, and it's probably true for
19 generation at this point as well.

20 MS. DAYNA STEINFELD: So with that in
21 mind, does it make sense to apply marginal cost
22 pricing to the nonelectric heat tail block but
23 essentially shelter electric heat customers from the
24 appropriate pricing signal?

25 MR. PAUL CHERNICK: Well, again, for

1 the price signal which is mostly a matter of the tail
2 block, I wouldn't shelter the non-low income all
3 electric and I would -- would try actually not even to
4 shelter the tail block usage of the low income
5 customers.

6 It's not a question of -- of reducing
7 the price signal, it's a question of reducing the
8 total burden on them.

9 MS. DAYNA STEINFELD: And maybe let's
10 just flip back to I think this volume page 128, please
11 and just scroll down to the highlighting.

12 How is the principal of simplicity in
13 rate-making achieved through your proposed rate
14 design?

15 MR. PAUL CHERNICK: Well, simplicity
16 is one (1) of those factors that you have to trade off
17 against other considerations. Each of these rates,
18 each customer would be facing a basic charge except
19 for low income from that would be zero, and a two (2)
20 block energy rate; not particularly hard to
21 understand.

22 For all the non-space heating
23 customers, the block sizes would be the same. For the
24 space heating customers, they would go up in the
25 winter, which I think is a pretty easy thing for a

1 electric heating customer to -- to understand about
2 the mechanism. The specific value each month, I don't
3 think that they need to -- to memorize those. It's
4 not something that's going to affect their daily life
5 or their behaviour.

6 They should know that they're paying a
7 higher rate for their -- for any additional usage or -
8 - and saving a higher rate for any reduction in usage
9 than their average rate. But again, those are not
10 very difficult things to explain.

11 So while there's a lot of numbers on
12 this page, I think for any customer looking -- who
13 cares to look at their bill and wants to understand
14 it, it's not really very complicated.

15 MS. DAYNA STEINFELD: And would you
16 agree that one (1) of the principles -- rate-making
17 principles that is being traded off in your rate
18 design to the favor of other principles is the
19 fairness principle; and by that I mean, interclass
20 subsidization issues?

21 MR. PAUL CHERNICK: Boy, fairness has
22 a lot of faces and you can say it's not fair that the
23 non-low income customers are paying more than low
24 income customers. But you can also say it wouldn't be
25 fair not to help the low income customers by lowering

1 their bills.

2 So, I would say that's -- that's really
3 in the eye of the beholder and you can define it as --
4 as being fair or unfair, depending upon your
5 perspective. And it's the kind of issue that people
6 like my client hardly ever agree with and people like
7 MIPUG that you have different perspectives on -- on
8 what's equitable, depending upon your concerns.

9 MS. DAYNA STEINFELD: And so should I
10 take it, Mr. Chernick, that when we're talking about
11 your eyes, fairness has a broader definition than
12 perhaps it would in Mr. Bonbright's eyes if he were
13 still with us?

14 MR. PAUL CHERNICK: You know, I've --
15 I've read the relevant parts of -- of Bonbright and I
16 don't know that he gives a very clear prescription as
17 to what he means by equitable or fair, various terms
18 that you -- you might use.

19 And I -- I don't think that he presents
20 a proposal for a slavish adherence to cost allocation
21 methodology in determining rates. So I really can't
22 tell you what the -- the ghost of Bonbright past might
23 tell us.

24 MS. DAYNA STEINFELD: Well maybe just
25 for completeness sake, Kristen, if we could put up

1 Manitoba Hydro 88, slide 9, please.

2

3

(BRIEF PAUSE)

4

5

MS. DAYNA STEINFELD: Possibly one (1)
6 slide down, 10 -- there we go. What I hear you
7 saying, Mr. Chernick, and this is Manitoba Hydro's
8 presentation from their direct evidence of the cost of
9 service rate design and bill affordability panel is
10 that your definition of the fairness and equity, and
11 perhaps Green Action Centre's definition is broader
12 than Manitoba Hydro's in terms of these rate-making
13 objectives.

14

MR. PAUL CHERNICK: In -- in terms of
15 the definition of "fairness" and "equity," it depends
16 on what you mean by a similar customer. And is a
17 customer in Winnipeg with access to gas similar to a
18 customer in the north without access to gas? Is a low
19 income customer similar to a modern income customer?
20 You know, that's the kind of thing that is not worth
21 arguing about in -- in my mind. We can agree that
22 these are different groups of customers and whether
23 they should have the same rates or different rates is
24 a question of what the -- what outcome the Board
25 thinks of it being fair, not a -- again, a mechanical

1 process of it's a residential customer, therefore, it
2 has to pay the same rates as a neighbouring customer.

3 MS. DAYNA STEINFELD: Okay, thank you,
4 Mr. Chernick. Perhaps if we could put up your
5 prefiled testimony at page 34, pdf page 36 and just go
6 down to line 23 and following.

7 MR. PAUL CHERNICK: Two (2) more pages
8 down. Yes, 36, is that --

9 MS. DAYNA STEINFELD: This is the
10 right page. Hard copy page 34 and starting at line
11 23.

12 In your evidence you are discussing
13 here that essentially if the Board is going to move
14 forward with a sophisticated low income rate design
15 that there should be a stakeholder process.

16 Would that be building on the
17 stakeholder process that's already been held on -- on
18 bill affordability or are you proposing a fresh start
19 in some regard?

20 MR. PAUL CHERNICK: I -- I think the
21 existing process is -- has the right players in it to
22 the extent that I'm -- I'm familiar with it and that
23 would be an appropriate place to -- to review the
24 adequacy of whatever the Board does in this case, and
25 the projection -- or the trajectory of changes over

1 time.

2 MS. DAYNA STEINFELD: And staying just
3 on -- on this page where we are but looking at --
4 beginning at line 19, I'd just like to understand what
5 your evidence is in this regard and here you say:

6 "Rather than applying a fixed
7 discount to low-income customers it
8 would be preferable to vary the
9 discounts to reflect the customer's
10 income level, perhaps as a
11 percentage of LICO for the household
12 size."

13 Do you agree that's what it says there
14 in your evidence?

15 MR. PAUL CHERNICK: Yes.

16 MS. DAYNA STEINFELD: Is this a
17 recommendation for a percentage of income program for
18 low-income customers as was discussed in the bill
19 affordability process?

20 MR. PAUL CHERNICK: Not exactly the
21 same but you might use percentage of income or percent
22 -- income as a percent of the LICO value to put people
23 in bins that would determine whether they get 100
24 kilowatt hours or 200 kilowatt hours or 400 kilowatt
25 hours of discounted energy, depending upon their

1 income level with the poorest people getting the most
2 assistance future.

3 MS. DAYNA STEINFELD: And is -- is
4 that a future or suggested refinement for your LICO-
5 125 rate design, or is that something different?

6 MR. PAUL CHERNICK: That would be an
7 enhancement or an elaboration on that rate design that
8 could be developed over the next year or two (2) and
9 rolled into future rate increases as the -- as
10 Manitoba Hydro comes in for -- for rate cases.

11 MS. DAYNA STEINFELD: And you've
12 spoken a few times today and have given different
13 examples about what I would maybe call targeted
14 assistance for different kinds of customers.

15 Is one (1) way of doing that to give
16 everybody the same rate design but have a bill credit
17 process where you get a credit at the end of your bill
18 at the end of a day?

19 MR. PAUL CHERNICK: So basically, you
20 could have a -- rather than -- then say, we're going
21 to give you \$8 a month off on your on -- on your
22 customer charge and whatever the number would be, \$5
23 off through a reduced energy price, we'll give you the
24 \$13 just as a credit at the bottom line. And you
25 could do that. That would be a reasonable approach as

1 well.

2 And it winds up not looking as much
3 like normal utility rate design but that may be fine.

4 MS. DAYNA STEINFELD: And are you
5 aware, is that something that's been done in other
6 jurisdictions?

7

8 (BRIEF PAUSE)

9

10 MR. PAUL CHERNICK: I can't answer
11 that off the top my head. I've certainly -- certainly
12 seen it proposed in some situations, particularly
13 where utilities were trying to combine time of use
14 rates with inclining blocks, and rather than having an
15 inclining block within each time of use period, they
16 just said, We'll give you a credit of this much.

17 The problem is, if you have a
18 particularly small customer, you may wind up charging
19 them nothing, or giving them a -- a net credit, which
20 strikes some people as not quite the right thing to
21 do. So in terms of public acceptability, the kind of
22 design that I've proposed may work better, but an
23 economist would tell you it doesn't make any
24 difference one (1) way or the other, but economists
25 don't tend to talk to people, so.

1 MS. DAYNA STEINFELD: Dr. Grant is
2 nodding at me, so I'll -- I'll accept that answer.
3 Mr. Chernick, this morning. You were asked a question
4 about your rate design and the Northern allowance.
5 Can I ask you for an undertaking to provide
6 information regarding the Northern allowance as it
7 currently exists, and -- and how it might be
8 incorporated into your rate design proposal?

9 MR. PAUL CHERNICK: When you say
10 "Northern allowances that currently exist," are you
11 talking about location allowances that exist for --
12 for other -- in other jurisdictions?

13 MS. DAYNA STEINFELD: In Manitoba, the
14 existing Northern allowance, which I understand is a
15 tax -- I think a tax credit structure.

16 MR. PAUL CHERNICK: The -- not a --
17 not -- not utility rates? Okay.

18 MS. DAYNA STEINFELD: Correct, yeah,
19 the -- an existing governmental Northern allowance,
20 and whether or not that could be used to refine or
21 contribute to in some way your rate design proposal.

22 MR. PAUL CHERNICK: To use the
23 existence -- the eligibility for a Northern allowance
24 credit as a trigger for a discount?

25 MS. DAYNA STEINFELD: To -- to tie the

1 two (2) together, correct.

2 MR. WILLIAM GANGE: The undertaking --
3 we will give an undertaking that Mr. Chernick will
4 review the Northern allowance. We will give our
5 position on -- on whether our understanding of the
6 legislation would allow such a -- a process, and --
7 and if the answer is that we believe that -- that it
8 could be allowed from a legislative point of view,
9 then -- then Mr. Chernick will review and provide his
10 view as to how those -- how the Northern allowance
11 could be used in rate design.

12 MS. DAYNA STEINFELD: Is that
13 sufficient for the court reporter? Thank you, Mr.
14 Gange.

15

16 --- UNDERTAKING NO. 41: GAC to review the Northern
17 allowance and if it is
18 believed such a process
19 could be allowed from a
20 legislative point of view,
21 Mr. Chernick will review
22 and provide his view as to
23 how the Northern allowance
24 could be used in rate
25 design

1
2 BOARD MEMBER GRANT: Could I ask about
3 that, just for -- I'm not sure of the legal question,
4 because all -- I mean, what would really be
5 interesting is to calculate a LICO-125 for the North.
6 And so if you use the Northern allowance as some sort
7 of proxy for a cost-of-living adjustment, and then
8 just adjusted the LICO-125s, I'm not sure it's really
9 a legal matter as much as -- right? Because it could
10 -- it -- it -- right now, we have different LICOs,
11 rural, urban. So we're -- we're making -- anyway, I'm
12 not -- I'm not --

13 MR. WILLIAM GANGE: Professor Grant,
14 we'll take your comments into consideration in -- in
15 responding to the undertaking, and -- and I hear the
16 concern that you have, and we certainly will -- will
17 do our best to respond fully to the -- to the question
18 was asked by Ms. Steinfeld.

19

20 (BRIEF PAUSE)

21

22 CONTINUED BY MS. DAYNA STEINFELD:

23 MS. DAYNA STEINFELD: Thank you, Mr.
24 Gange and Mr. Chernick. Let's move on to demand
25 charges. Can you, Mr. Chernick, just for our benefit,

1 briefly explain what a demand charge is?

2 MR. PAUL CHERNICK: Yes. I probably
3 should have done that. So a -- a -- an electric
4 utility demand charge basically identifies the highest
5 consumption rate during the month by that customer,
6 either on an hourly basis, or some utilities use a
7 fifteen (15) minute interval, and looks at -- at that
8 time period, whenever it occurs.

9 So one (1) customer may have their
10 maximum usage at four o'clock in the morning on a
11 Sunday, and somebody else may have it at -- at 7:00
12 p.m. on Wednesday, three (3) day -- three (3) weeks
13 later. And their bills for the demand charge will be
14 based on their usage in those very different hours.

15 MS. DAYNA STEINFELD: Do you accept
16 what I think Manitoba Hydro has put forward in this
17 proceeding, that demand charges provide greater
18 revenue certainty for utilities?

19 MR. PAUL CHERNICK: They are generally
20 viewed as fixed charges, like customer charges, and
21 they're hard to avoid. Even if a -- a -- an
22 industrial customer, for example, is -- goes from
23 working two (2) shifts to working one (1) shift, their
24 demand may be exactly the same. Their energy use is
25 much lower. So -- and -- and their contribution to

1 peak demand may -- may be much lower, and so on. But
2 they -- the revenue from demand charges does tend to
3 be more stable.

4 MS. DAYNA STEINFELD: And demand
5 charges send at least an indirect price signal to
6 customers that incentivizes lowering overall demand
7 consumption. Do you agree?

8 MR. PAUL CHERNICK: To lowering their
9 demand, which, for a factory that's starting up its
10 equipment at six o'clock so that it's ready to -- for
11 the seven o'clock shift to operate would mean reducing
12 the six o'clock load by maybe stretching that out
13 later into seven and eight o'clock, when the load from
14 other -- load in general may be rising as people wake
15 up and so on, and actually increasing the load on the
16 distribution feeder, on the substation, on the
17 transmission line, on the generation system. So it
18 tells the customer to reduce their monthly peak load,
19 whether or not that's helping in any way with any real
20 problem for the Utility.

21 MS. DAYNA STEINFELD: And your
22 evidence is that the Board require Manitoba Hydro to
23 reduce demand charges over time and increase energy
24 charges, correct?

25 MR. PAUL CHERNICK: Yes.

1 MS. DAYNA STEINFELD: And is that a
2 proposal to eventually get to time of use rates?

3 MR. PAUL CHERNICK: Yes, that -- that
4 there are costs that vary by time, and whether through
5 time of use rates or the other alternatives that I
6 laid out, such as critical peak pricing, we say we
7 don't know which hours will be the really high hours
8 on the system, but whenever they are, that's when
9 we'll bill you these charges.

10 Whether it's time of use, or critical
11 peak, or some other charge that responds to the system
12 conditions, that would be a much more efficient way of
13 pricing than using the non-coincident customer maximum
14 demand charge.

15 MS. DAYNA STEINFELD: And your
16 evidence is that the energy charges of demand-metered
17 customers are significantly below marginal cost?

18 MR. PAUL CHERNICK: Yes, and that's
19 also -- Hydro's numbers will indicate the same thing.
20 That's not just a matter of -- it's not real dependent
21 on my -- any of my corrections.

22 MS. DAYNA STEINFELD: And that would
23 include Hydro's revised number of five point seven-
24 five (5.75)?

25 MR. PAUL CHERNICK: Yes. It's even

1 lower for the largest customers, but it -- but their -
2 - their energy rates are still below the marginal
3 costs.

4 MS. DAYNA STEINFELD: And does that
5 remain the case if Manitoba Hydro is successful in
6 receiving its indicative rate plan over time?

7 MR. PAUL CHERNICK: I think it would
8 take a long time before they get up to a realistic
9 marginal cost for most of these classes.

10

11 (BRIEF PAUSE)

12

13 MS. DAYNA STEINFELD: If we return to
14 PUB-42-5, Board counsel book of documents Volume V,
15 and go to page 141, please. And if we can just scroll
16 down, that's -- just up a little bit, Kristen. That's
17 perfect. Thank you.

18 Mr. Chernick, the cost of service study
19 gives us a unit cost by customer demand and energy,
20 correct?

21 MR. PAUL CHERNICK: Yes.

22 MS. DAYNA STEINFELD: And in PCOSS18,
23 the allocated unit demand costs are higher than the
24 demand charges, correct?

25

1 (BRIEF PAUSE)

2

3 MR. PAUL CHERNICK: Yes, but those
4 demand costs are based on coincident demands, not
5 customer maximum demands, so those should really be in
6 a time of use or a similar charge that reflects usage
7 at the times of high loads.

8 MS. DAYNA STEINFELD: So what you're
9 saying is that the Board shouldn't look at this chart
10 and take it to mean that demand charges should, in
11 fact, be increased, not decreased?

12 MR. PAUL CHERNICK: Right.

13 MS. DAYNA STEINFELD: You helpfully
14 earlier explained to me what demand charges are. Can
15 you also helpfully explain what demand ratchets are?

16 MR. PAUL CHERNICK: Yes. A -- a
17 demand ratchet is -- is a rate provision that says
18 your demand charge this month will be the higher of
19 your metered demand this month, or some percentage of
20 your demand in -- over the preceding year, for
21 example. So it's a ratchet in the sense of a ratchet
22 wrench, which will turn one (1) way, but not the
23 other, that once you've had a high demand, then the --
24 then lowering your dema -- demand in subsequent months
25 may not do you any good.

1 Now, Hydro has a 25 percent ratchet
2 over the previous year, its loads, so that's not very
3 -- very draconian, and it -- it's -- I've certainly
4 seen worse, but it still will tend to, for some
5 customers, give them no incentive. They had a very
6 high load one month when they had a lot of orders, and
7 maybe some mal -- equipment malfunctions which caused
8 higher usage. They had one (1) hour that was really
9 off the charts, and then for the next year,
10 potentially, their loads may be low enough that they
11 just don't worry about it all. So it's a useless
12 charge in terms of providing any signal whatsoever.

13 MS. DAYNA STEINFELD: When you say
14 it's a "useless charge," your evidence is that demand
15 ratchets should be eliminated, correct?

16 MR. PAUL CHERNICK: Yes.

17 MS. DAYNA STEINFELD: Do you accept
18 Manitoba Hydro's position that demand ratchets are
19 contract provisions that encourage customers to more
20 carefully assess their capacity requirements and not
21 reserve excess capacity, "just in case"?

22 MR. PAUL CHERNICK: Looking over the
23 tariffs, I can't see where it really has that effect,
24 because there's -- I don't see a penalty for exceeding
25 your contract demand. So I'm not really sure to what

1 extent that's a -- a factor.

2 If they have very large customers who
3 are -- whose loads dominate, say, the feeder that
4 they're on, then some kind of contract provision to
5 encourage or require them to stay below a certain
6 level, because that customer by themselves can create
7 the -- the peak on the -- that local equipment. That
8 may make sense in very limited circumstances.

9 MS. DAYNA STEINFELD: And shifting
10 gears slightly on this, if the Board followed your
11 recommendation, would lower demand charges and higher
12 energy charges make it more economical for customers
13 to install solar PV systems?

14 MR. PAUL CHERNICK: That would tend to
15 be the -- the case. It would also mean that if they
16 installed storage to, for example, use PV more
17 efficiently, then it would make sense for them to use
18 that to respond to whatever time of day incentives are
19 given rather than to use storage to smooth out their
20 own peak at whatever hour that occurs, but rather, to
21 use it to help the system rather than meet an
22 arbitrary rate design target.

23 MS. DAYNA STEINFELD: And would that,
24 Mr. Chernick, put Manitoba Hydro at risk of not
25 recovering its revenue requirement?

1 MR. PAUL CHERNICK: Again, to the
2 extent that you think of demand charges as being fixed
3 charges, and energy charges as being more variable and
4 more under customer control, you will tend to
5 encourage efficiency with -- with higher energy
6 charges, and that will tend to decrease load growth
7 over time. So, yes, it'll have an effect on revenues.

8 MS. DAYNA STEINFELD: Thank you, Mr.
9 Chernick. And just two (2) last questions to wrap up,
10 here. Kristen, if we could start with Manitoba
11 Hydro/GAC-1-10(a), please. And I'll just put that up
12 for reference, but in this information request
13 response, you state that provided you had the
14 necessary data, you would attempt to provide proof of
15 revenues statements for your conservation rate
16 proposal prior to the hearing

17 What is the status of that work?

18 MR. PAUL CHERNICK: I don't believe
19 that I -- I've located the necessary data, and I
20 wasn't able to provide the analysis.

21 MS. DAYNA STEINFELD: Thank you. And
22 lastly, PUB/GAC-6, please, Kristen. And in response
23 to this information request, you stated that if
24 possible, you would calculate and subsequently file
25 the lost revenues, recovery rates, and bill impacts

1 associated with using energy burdens of excess of 6
2 percent and 10 percent in your conservation rate
3 proposal.

4 Can you advise us to the status of --
5 of that work, Mr. Chernick?

6 MR. PAUL CHERNICK: I haven't done
7 that. I'm not -- I don't recall offhand whether I
8 determined that -- that I was missing some piece of
9 information, or whether it just slipped through the
10 cracks. I'm sorry.

11 MS. DAYNA STEINFELD: Well, perhaps we
12 could take that as an undertaking, and Mr. Gange, if
13 the necessary data is not available, that -- that
14 could be the response, but it might be helpful to get
15 clarity on that by way of undertaking.

16 MR. WILLIAM GANGE: Yes, we'll do
17 that.

18 MS. DAYNA STEINFELD: And so for the -
19 - the court reporter, I -- I believe the undertaking
20 is that Mr. Chernick will provide the response to
21 PUB/GAC-6(a). Is that satisfactory, Mr. Gange?

22 MR. WILLIAM GANGE: If the evidence is
23 available.

24

25 --- UNDERTAKING NO. 42: GAC to provide the

1 response to PUB/GAC-6(a)
2 if the evidence is
3 available
4

5 MS. DAYNA STEINFELD: Thank you, Mr.
6 Chair. Those are my questions. I'd like to thank Mr.
7 Chernick for his assistance today.

8 THE CHAIRPERSON: Thank you. Ms.
9 Dilay, I understand you have a few questions.

10

11 CROSS-EXAMINATION BY MS. KATRINE DILAY:

12 MS. KATRINE DILAY: Yes, thank you,
13 Mr. Chair. As Dr. Williams had indicated, we -- we
14 have a few more questions, and these are questions
15 that arose in discussions with AMC legal counsel as
16 well this afternoon.

17 Mr. Chernick, my name is Katrine Dilay.
18 I'm also counsel to the Consumers Coalition in this
19 proceeding, along with Dr. Williams. So these --
20 these are some questions that are as a follow-up to
21 some questions that were posed by the Assembly of
22 Manitoba Chiefs, and may also relate to an undertaking
23 that you have agreed to provide.

24 Mr. Chernick, we're wondering if you
25 have considered what the cost impact of your rate

1 proposal would be if all on-reserve consumers were
2 considered eligible for the low-income rate that you
3 are proposing?

4 MR. PAUL CHERNICK: I haven't done
5 that analysis. I assume that a lot of those customers
6 would be included in the low income category anyway,
7 the -- the vast majority of them, so I don't know that
8 it would change my numbers very much, and I don't -- I
9 don't think that we have the information necessary to
10 break out the on-reserve and the other LICO customers.

11 MS. KATRINE DILAY: So I -- I believe
12 there's information on the record about how many on-
13 reserve customers there are. I don't have the
14 information on hand. If that is something you are
15 able to locate, would you be able to provide that by
16 way of undertaking?

17 MR. PAUL CHERNICK: Yeah. It's not -
18 it's not a matter of how many on-reserve customers
19 there are. The problem is that a lot of those are
20 already intruded -- included in the low income
21 category, is my understanding. So I would need a
22 break-out of the low income on-reserve as opposed to
23 the total on -- on-reserve, and it's really only the
24 non-low income on-reserve who'd be added into the
25 calculation.

1 And my expectation is that would be a
2 small percentage of the low income, and it wouldn't
3 make much difference in the calculation. I don't
4 think we have the -- the information, but there are
5 things in the record that I haven't actually stumbled
6 upon. Few.

7 MS. KATRINE DILAY: Mr. Chernick, have
8 you considered the cost impact if there was a higher
9 consumption block, so a higher first block, for on-
10 reserve residential con -- consumers to account for
11 higher heating needs on-reserve?

12 MR. PAUL CHERNICK: I have not done
13 that, and I could do that -- that calculation, if --
14 if you'd like.

15 MS. KATRINE DILAY: If you are able to
16 provide that by way of undertaking --

17 MR. PAUL CHERNICK: Okay.

18 MS. KATRINE DILAY: -- we would
19 appreciate that.

20 MR. PAUL CHERNICK: All right. That
21 will be a -- a rough approximation.

22

23 (BRIEF PAUSE)

24

25 MS. KATRINE DILAY: So we would

1 appreciate if GAC could provide information about the
2 cost impact of the rate design proposal with a higher
3 consumption block for on-reserve residential
4 consumers.

5 MR. PAUL CHERNICK: And did you want
6 to specify the -- the block or leave that to -- to my
7 judgment?

8 MS. KATRINE DILAY: And I believe the
9 undertaking from earlier today for AMC was to provide
10 some kind of proposal, so --

11 MR. PAUL CHERNICK: Okay.

12 MS. KATRINE DILAY: -- I believe based
13 on -- on that undertaking would be --

14 MR. PAUL CHERNICK: That's fine.

15 MS. KATRINE DILAY: -- appreciated.

16

17 --- UNDERTAKING NO. 43: GAC to provide information
18 about the cost impact of
19 the rate design proposal
20 with a higher consumption
21 block for on-reserve
22 residential consumers

23

24 MS. KATRINE DILAY: And if you'd just
25 give me one (1) second, here.

1 And so just going back to my earlier
2 question regarding --

3 MR. WILLIAM GANGE: Ms. Dilay, if you
4 could, and Mr. Chair, if we could just have a two (2)
5 minute break?

6 THE CHAIRPERSON: Certainly.

7 MR. WILLIAM GANGE: Thank you.

8

9 --- Upon recessing at 4:51 p.m.

10 --- Upon resuming at 4:55 p.m.

11

12 THE CHAIRPERSON: Ms. Dilay...?

13 MS. KATRINE DILAY: Thank you.

14

15 (BRIEF PAUSE)

16

17 THE CHAIRPERSON: Sorry, Ms. Dilay.

18

19 CONTINUED BY MS. KATRINE DILAY:

20 MS. KATRINE DILAY: Thank you. And
21 just going back to the first question that we had
22 talked about regarding the cost impact if all on-
23 reserve cust -- customers were deemed to be eligible
24 for the low-income rate, I'm wondering if there is
25 information on the record you may be able to use to

1 provide that information.

2 Kristen, could we pull up AMC/Manitoba
3 Hydro First Round IR 23, at the bottom there. And so
4 this chart was from the 2014 residential energy use
5 survey, and it categorizes First Nations residential
6 basic customers by income, and at the bottom, by LICO-
7 125 status.

8 And we recognize the sample size is
9 quite small, but given that this is information on the
10 record, is that something you'd be able to -- to use?

11 MR. PAUL CHERNICK: Well, it's quite a
12 leap. But if you'd like me to assume that roughly a
13 third of the on-reserve customers are not LICO-125,
14 which is what's suggested here, I could -- I could do
15 that, and that would be a pretty simple calculation to
16 --

17 MS. KATRINE DILAY: If you're --

18 MR. PAUL CHERNICK: -- see what the
19 effects are.

20 MS. KATRINE DILAY: If you're able to,
21 that would be great, recognizing that information is
22 coming from -- from this IR.

23 THE CHAIRPERSON: Ms. Dilay, you'd
24 better give the reporter the undertaking.

25 MS. KATRINE DILAY: Thank you. So the

1 second undertaking would be to provide the cost impact
2 of Mr. Chernick's rate design proposal if all on-
3 reserve customers were being considered eligible for
4 the low-income rate, using information from
5 AMC/Manitoba Hydro First Round IR 23.

6

7 --- UNDERTAKING NO. 44: GAC to provide the cost
8 impact of Mr. Chernick's
9 rate design proposal if
10 all on-reserve customers
11 were being considered
12 eligible for the low-
13 income rate, using
14 information from
15 AMC/Manitoba Hydro First
16 Round IR 23.

17

18 CONTINUED BY MS. KATRINE DILAY:

19 MS. KATRINE DILAY: And the last
20 portion would be relating to the two (2) undertakings
21 we just talked about, whether you'd also be able to
22 provide how much of a surcharge that would cause for
23 other customers just like you did in your previous
24 work, both for just the residential class, as well as
25 for all consumer classes.

1 MR. PAUL CHERNICK: Yes, I could do
2 that.

3 MS. KATRINE DILAY: Thank you very
4 much, Mr. Chernick. Those are all of our questions.
5 So it'll be, I guess, a third part to -- in addition
6 to the cost impact, it would be to provide how much of
7 a surcharge this would cause to other con --
8 consumers. Thank you. Thank you, Mr. Chair.

9
10 --- UNDERTAKING NO. 44: GAC to provide how much of
11 a surcharge it would cause
12 other customers if all on-
13 reserve customers were
14 being considered eligible
15 for the low-income rate,
16 both for the residential
17 class, as well as for all
18 consumer classes

19
20 THE CHAIRPERSON: Thank you, Mr.
21 Gange, any reexamination?

22 MR. WILLIAM GANGE: No, Mr. Chair.

23 THE CHAIRPERSON: Could you be more
24 succinct?

25 MR. WILLIAM GANGE: Not likely.

1 THE CHAIRPERSON: Okay. I'm sorry.

2 Ms. McKay has a question?

3 BOARD MEMBER MCKAY: I have two (2)
4 questions. I'm just wondering how are -- other than
5 First Nations communities, how are other Northern and
6 isolated communities captured in the data that you're
7 preparing?

8 The second one is, in your definitions
9 of spring, summer, fall, and winter, whose definition
10 are you using on that? That's --

11 MR. PAUL CHERNICK: I was using the
12 calendar's def -- definition. That is, when the --
13 the power is being used, in terms of Hydro's billing,
14 those -- those discounts should be lagged a month or
15 so to reflect the fact that the -- the energy billed
16 in -- in -- the energy used in February, for example,
17 is billed in February, March, or April. And so,
18 sliding the -- the discount a month to -- and the
19 billing would seem appropriate.

20 Hydro may have an -- a different
21 proposal for exactly how to do that. I don't think it
22 should get very complicated.

23 You had another question?

24 BOARD MEMBER MCKAY: Yeah, there was
25 the first one.

1 MR. PAUL CHERNICK: I'm sorry. It's
2 been a fairly long day. I -- other than -- than
3 addressing whether the Northern allowance for income
4 tax is -- is usable for the determining a -- a
5 discount, I don't know of any other approach that's
6 been proposed for dealing with the other Northern
7 communities outside the reserves. If you have an
8 idea, I'd be happy to try and work with it, but I'm
9 not the person in the room with the most information
10 about the data that's available from various Manitoba
11 sources.

12 BOARD MEMBER MCKAY: Yeah. Why I ask
13 that is that we -- we, you know, with good reason,
14 there -- there is a lot of focus on First Nation
15 communities as they are being represented, but there
16 is a group that is not being represented, I'm
17 thinking. You know, in part, I would -- I would
18 probably suggest through the Consumers Coalition, you
19 know, because they are consumers as well, but I just
20 don't want that group to be missed in our
21 considerations, if you will.

22 BOARD MEMBER GRANT: I don't have to
23 be anywhere for quite a while, so I can stay.

24 MR. PAUL CHERNICK: My -- my flight's
25 tomorrow, so.

1 BOARD MEMBER GRANT: Listen, I'm a
2 all-electric consumer in one (1) of these legacy
3 buildings, so I really appreciate your concern for me,
4 which was more than someone showed me a little --
5 couple days ago, but on the other -- but this is a
6 horrible incentive, you'd have to acknowledge that.
7 You know, what you're doing is essentially subsidizing
8 this old, outmoded capital stock that you probably --
9 you know, I've got this big, electricity-guzzling
10 building. Once you go out of, you know, what -- it --
11 the market would have, it would move off the market,
12 and I would move into some wonderful energy-efficient
13 place.

14 So -- and so I appreciate your thought.
15 I -- I guess I'm wondering not how unique am I, but do
16 you have any idea -- I -- I'm sure you don't know for
17 Winnipeg, but in a city -- an American city of, you
18 know, Winnipeg's approximate size, do you know how
19 much of the housing stock might be composed of this
20 sort of all-electric legacy-type buildings, or -- or
21 maybe that's not even a relevant comparison --

22 MR. PAUL CHERNICK: I -- I --

23 BOARD MEMBER GRANT: -- to be on fuel
24 -- oil, or something, or --

25 MR. PAUL CHERNICK: -- I think that

1 probably varies a lot depending upon the city, and
2 when it was built, and what prices were like. There
3 was a period in the 1960s when electricity was
4 inexpensive, and developers were going all-electric,
5 because customers didn't particularly care, and it was
6 easier for them to put it in, and so cities like
7 Boston still have a lot of -- all -- and even New York
8 have a lot of all-electric.

9 BOARD MEMBER GRANT: But it's just
10 that, you know, you mention that you thought it wasn't
11 really a significant distortion, because it's such a
12 fraction of the housing stock, right? I think in your
13 slide, when you were mentioning that, weren't as
14 worried about the all-electric discount because --

15 MR. PAUL CHERNICK: I wasn't worried
16 about the all-electric discount because the -- the
17 decisions about whether to turn down your thermostat,
18 or turn off the lights when you're leaving the room,
19 or make sure that the south-facing blinds are open
20 before you leave for work in the morning so that you
21 can use solar heating instead of electricity, that
22 those decisions were all going to be driven by your
23 tail block rate for the month.

24 And the percentage of load that's in
25 that first block is really very small, and I chose the

1 monthly increments of -- of load for the heating
2 customers to -- to make sure that most of the -- the
3 vast majority of the energy was in bills that ended
4 well above those blocks so that the incentive for
5 those kinds of short-term measures would -- would
6 persist. And for that matter, for -- for energy
7 efficiency, for adding thermal curtains to -- to
8 reduce the -- the loss through your windows.

9 Now, in terms of fuel switching, you
10 are -- you are correct that you blunt the -- the
11 incentive for fuel switching by making the existing
12 electric heat a little bit more tolerable.

13 BOARD MEMBER GRANT: It's just that if
14 it's not even viable for me to fuel switch, that --
15 then what should happen is that old capital stocks
16 simply gets redundant and goes off the market and
17 people move, right? And that's -- that's the way the
18 market would adjust over the long --

19 MR. PAUL CHERNICK: I don't think you
20 see that unless the city is -- is failing, for the
21 most part, that -- that heating source determines
22 whether multifamily buildings are -- are demolished
23 and replaced. There are ways of running gas supply
24 up the outside of a building and having through-the-
25 wall gas heaters. So you -- you can do that sort of

1 thing if -- if the economics work out and it's
2 something that -- that Power Smart ought to evaluate.

3 And just as the higher tail block will
4 reduce the -- the incentives that Power Smart has to
5 pay for most measures, the space heating discount will
6 slightly increase the amount that -- that ever -- that
7 Power Smart has to pay for the same -- to -- to get
8 people to switch fuels or to retrofit heat pumps where
9 that's feasible.

10 BOARD MEMBER GRANT: Okay. Thank you.

11 THE CHAIRPERSON: Mr. Chernick, it's
12 been a long day, and we appreciate your attendance and
13 assistance to the Board throughout the day. Thank you
14 very much, sir.

15 MR. PAUL CHERNICK: Wonderful. Thank
16 you. And I have had longer, but I've had few days
17 that were more enjoyable on the stand.

18 THE CHAIRPERSON: Okay. Thank you.

19 We'll adjourn until nine o'clock
20 tomorrow morning.

21 MS. ODETTE FERNANDES: Mr. --

22 THE CHAIRPERSON: Thank you.

23 MR. KURT SIMONSEN: Hold it.

24 MS. ODETTE FERNANDES: -- Mr.

25 Chairman, if I might, I'll just delay you one (1) more

1 minute.

2 THE CHAIRPERSON: Sure. Sure.

3 MS. ODETTE FERNANDES: Manitoba Hydro
4 has some responses to undertakings --

5 THE CHAIRPERSON: Okay.

6 MS. ODETTE FERNANDES: -- we'd like to
7 file.

8 THE CHAIRPERSON: Certainly.

9 MS. ODETTE FERNANDES: The first one
10 is a response to Manitoba Hydro Undertaking number 32,
11 and that would be marked as Hydro Exhibit number 108.

12

13 --- EXHIBIT NO. MH-108: Response to Manitoba Hydro
14 Undertaking 32

15

16 MS. ODETTE FERNANDES: The response to
17 Manitoba Hydro Undertaking number 34 would be Manitoba
18 Hydro Exhibit number 109.

19

20 --- EXHIBIT NO. MH-109: Response to Manitoba Hydro
21 Undertaking 34

22

23 MS. ODETTE FERNANDES: And then the
24 response to Undertaking number 38 would be Manitoba
25 Hydro Exhibit number 110.

1 --- EXHIBIT NO. MH-110: Response to Manitoba Hydro
2 Undertaking 38

3

4 THE CHAIRPERSON: Thank you.

5 MR. KURT SIMONSEN: Thank you.

6 THE CHAIRPERSON: Okay. Thank you

7 all.

8

9 --- Upon adjourning at 5:07 p.m.

10

11

12 Certified Correct,

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18 Cheryl Lavigne, Ms.

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