

1 New Brunswick Board of Commissioners of Public Utilities
2 In the Matter of an application by the NBP Distribution &
3 Customer Service Corporation (DISCO) for changes to its
4 Charges, Rates and Tolls - Revenue Requirement

5
6 Delta Hotel, Saint John, N.B.
7 January 26th 2006

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BOARD STAFF: Doug Goss
John Lawton

BOARD SECRETARY: Lorraine Légère

CHAIRMAN: Good morning, ladies and gentlemen. Could I have
appearances please. For the Applicant?

MR. RUBY: Thank you, Mr. Chair. Peter Ruby and Clare
Roughneen for Disco, joined by David Hashey, Mike Gorman,
Tony O'Hara and Bridger Mitchell.

CHAIRMAN: Thank you, Mr. Ruby. Canadian Manufacturers &
Exporters? I heard on the news they were going to be
involved in this hearing henceforth, but they are not here

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2 today. Conservation Council? Eastern Wind? Enbridge Gas New
3 Brunswick? The Irving Group? Jolly Farmer? Mr. Gillis?
4 Rogers?

5 MS. MILTON: Leslie Milton, counsel for Rogers, with Roger
6 Ware, Donald Ford, Christiane Vaillancourt, Clinton
7 Lawrence and John Armstrong.

8 CHAIRMAN: Thank you, Ms. Milton. Self-represented
9 individuals? The Municipal Utilities?

10 MR. GORMAN: Good morning, Mr. Chairman and Commissioners.
11 Raymond Gorman appearing for the Municipal Utilities.
12 This morning I have Richard Burpee, Dana Young, Darren
13 Lamont and Bob Bernard with me.

14 CHAIRMAN: Thanks, Mr. Gorman. Vibrant Communities? And
15 the Public Intervenor?

16 MS. YOUNG: Good morning, Mr. Chairman. Theresa Young for
17 the Public Intervenor.

18 CHAIRMAN: Thank you. And again are there any -- Hydro
19 Quebec is here. Right. Any other Informal Intervenors?

20 MS. SAM: Good morning, Mr. Chairman. Helen Sam with the
21 Canadian Electricity Association.

22 CHAIRMAN: Right. Thank you. You are basically a watching
23 brief, aren't you, because you are not an Intervenor.
24 Okay, any preliminary matters?

25 MR. RUBY: Mr. Chairman, I think we left off yesterday with

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scheduling. We are in your hands as to when you would like to talk about that.

CHAIRMAN: Well on the way from the breakout room to here I had a chat with Mr. Hashey. And after we dealt with places to have lobster boils in St. Andrews, why, he indicated that telephone calls are being made so perhaps we can wait until a little later in the hearing to talk about adjourned dates.

MR. RUBY: Thank you, Mr. Chair.

MR. MACNUTT: Mr. Chairman, just before we go, Peter MacNutt appearing on behalf of the Board. And I have with me Doug Goss, Senior Advisor and John Lawton, Advisor.

CHAIRMAN: Thank you, Mr. MacNutt. And again, my apologies. Okay, Mr. Ruby, go ahead, sir.

MR. RUBY: Well as I understand it, Ms. Milton was going to continue her cross examination.

CHAIRMAN: That is exactly what will happen. I beg your pardon. Ms. Milton, go ahead.

MS. MILTON: Thank you, Mr. Chairman.

CHAIRMAN: We do treat this very seriously. But there are some light moments.

MS. MILTON: That is good news. Good morning, Dr. Mitchell.

DR. MITCHELL: Good morning, Ms. Milton. Good morning, members of the Board.

2 Q.65 - I wonder if we could start with some of your examples.

3 And the first example that I would like to go to is your
4 pole example which is on page 9 of your evidence. And it
5 starts at line 5.

6 CHAIRMAN: And that is in exhibit number what, Ms. Milton?

7 MS. MILTON: Exhibit A-64.

8 CHAIRMAN: Thank you.

9 Q.66 - Page 9, starting at line 5.

10 A. Yes, I have it.

11 Q.67 - Now as I understand that example, you have three users
12 on the pole. Each of them has the same requirement for
13 dedicated space. Is that correct?

14 A. Yes.

15 Q.68 - So as I understand it, the proportionate use model that
16 Dr. Ware has proposed and the equal sharing model that you
17 have proposed would get the same results. Is that
18 correct?

19 A. With regard to allocation of the space, I believe that is
20 correct.

21 Q.69 - And with regards to the allocation of the costs if you
22 use a space model, would you not get the same results?
23 They are each using 1/3 of the dedicated space. You would
24 allocate the common space 1/3 each?

25 A. Yes.

2 Q.70 - Proportionate use model would allocate the space 1/3
3 each. Correct?

4 A. Yes.

5 Q.71 - Thank you. Now you have talked quite a bit in your
6 report about a taxi example. And as I understand it, that
7 involves the shared use of a taxi by three musicians. I
8 believe there is a violinist, a violist and a cellist. Is
9 that correct?

10 A. Yes.

11 Q.72 - Now what would be the shared common resource in that
12 example?

13 A. Well the common resource would be the taxi cab ride. One
14 trip.

15 Q.73 - So the taxi cab from their hotel to the airport is the
16 common resource or the common cost. Is that correct?

17 A. Yes.

18 Q.74 - And as I understand it, each of those musicians is
19 going to require one seat in the cab. Is that correct?

20 A. Yes.

21 Q.75 - So they are each going to be making equal use of the
22 common resource. Correct? They are each requiring one
23 seat?

24 A. They each require one seat. They each require one ride.

2 Q.76 - All right.

3 A. So the resource being allocated here is one trip and each
4 of the three passengers requires a complete trip.

5 Q.77 - All right. Now I am going to modify the example a
6 little bit. And just before they are about to leave the
7 hotel, a fourth musician that is part of their group runs
8 up and they say, come on, jump in. Now as I understand
9 it, in that situation you would propose then that the cost
10 of the taxi be divided into 1/4 for each passenger. Is
11 that correct? We have gone from three passengers to four
12 passengers --

13 A. Right.

14 Q.78 - -- so we would allocate equally?

15 A. And does your example accommodate four passengers in one
16 cab?

17 Q.79 - Yes, sir, they got the same cab.

18 A. Yes.

19 Q.80 - Now in most sedans I have been in there are four seats,
20 the taxi cab driver is going to take one of them. And the
21 three musicians are occupying the three other seats. So
22 the fourth musician --

23 A. Excuse me --

24 Q.81 - Pardon?

25 A. -- I thought you said there was sufficient seats for

2 four passengers.

3 Q.82 - Well we are getting there.

4 A. Well let me back up and correct my answer then. I believe

5 I said -- I asked whether there were four seats for four

6 passengers.

7 Q.83 - Well I am sorry, I didn't hear you. Anyway, we are

8 going to have the fourth musician come along and the

9 fourth musician squeezes into the back seat on the hump.

10 We have got four musicians. How would you allocate the

11 costs in that circumstance?

12 A. Well I think this is -- to use an example, the four

13 passengers would probably negotiate and the one with the

14 inferior seat might well claim a smaller share of the

15 costs.

16 Q.84 - So you might actually have one user paying less?

17 A. You might because they may well be getting in effect

18 different amounts of dedicated seat space. That fourth

19 seat may not be equivalent to the other three seats.

20 Q.85 - So they are actually -- they are not getting equal

21 benefit from the common space? Is that correct? So they

22 might pay less?

23 A. That fourth user might be willing only to pay a smaller

24 portion.

25 Q.86 - All right. Let's try another example. I am going to

2 call this the parking spot example.

3 A. I'm sorry, the?

4 Q.87 - It's a new example. I will call it the parking spot
5 example.

6 A. Right.

7 Q.88 - And in this example, my kids finally get to me and I
8 agree to job share. So I am going to work three days a
9 week and my co-worker is going to work two days a week.
10 We both drive to work so we both need a parking spot. We
11 could both pay the monthly fee for separate parking spots
12 or we could share one spot.

13 Now there are two users of the parking space. As I
14 understand it, if you do an equal sharing of the cost of
15 that common space, I would pay a half of the monthly fee
16 and my co-worker would pay a half of the monthly fee.

17 Would that be what you would do under an equal sharing
18 approach?

19 A. Well if you mean by an equal sharing approach dividing the
20 cost in two, that is a division of two, I agree with that.

21 Q.89 - All right. But in fact if we just take the work week
22 and a five day work week, I am using it three out of five
23 days and my co-worker is using it two out of five days.

24 Would you still propose to allocate the cost of the

2 parking spot equally between me and my co-worker?

3 A. For this type of example, I would not propose it.

4 Q.90 - And why would you not do that here?

5 A. Because when your co-worker occupies that space, it is not
6 available to you.

7 Q.91 - Well how -- I'm not quite sure how that is relevant.

8 Can you explain why that is relevant?

9 A. When a cable company occupies dedicated space on the pole,
10 the pole is still available to the other attachers. Its
11 use of the dedicated space does not detract from the use
12 of the common space by the other attachers.

13 In the case of the parking example, your partner's --
14 colleague's use of the parking space does prohibit you
15 from using the same common resource.

16 Q.92 - And so in that circumstance you wouldn't use an equal
17 sharing approach?

18 A. I would not recommend one there.

19 Q.93 - All right. Would you agree with me that the benefit --
20 if there are benefits to ownership of the poles, then
21 equal sharing of common costs might not be fair?

22 A. That is a question that could be explored. It would be
23 obviously an issue of what those benefits are, what other
24 costs go with it, what arrangements are made to deal with
25 those?

2 Q.94 - All right. But if they would all benefit equally, then
3 you might not do equal sharing of common costs. Is that
4 correct? I think that's where we got to in the taxi
5 example, isn't it? The person on the hump.

6 A. Yes. Well, let me say first an equal division of common
7 costs is one approach that satisfies some equity
8 considerations. There are other approaches that also meet
9 tests of fairness. And I think some of the critique
10 directed at Dr. Yatchew and my report is a little
11 misplaced in suggesting that our recommendation is
12 exclusively for one approach, namely equal division. That
13 is one possible allocation, but not the only one that
14 satisfies fairness requirements.

15 Q.95 - But as I --

16 A. I am coming to your question. Where there are unequal
17 benefits to parties or limitations on their ability to
18 finance effectively a full sharing, there can well be a
19 different division of costs that ends up being fair.

20 Q.96 - All right. Thank you, Dr. Mitchell. Now in your
21 prefiled evidence and in your presentation yesterday you
22 had presented three rules for sharing of common costs.
23 And I believe that you indicate that these rules are
24 supported by a chapter by Young in the Handbook of Game
25 Theory with Economic Applications, is that correct?

2 A. Yes.

3 Q.97 - And in your presentation you referred to another
4 article. Was that article referred to in your prefiled
5 evidence?

6 A. The chapter by Nicholas Curien?

7 Q.98 - Yes.

8 A. No, it was not.

9 Q.99 - Thank you. Now this handbook as I understand it, it
10 applies game theory to economic problems to determine
11 economic solutions. Would you agree with me?

12 A. Yes.

13 Q.100 - Thank you. Would you agree with me that Young states
14 that in order to be efficient, a rate charged to each user
15 must be no less than the incremental cost of the user's
16 participation in the game? In order to be efficient the
17 rate has to be no less than incremental cost of the user's
18 participation in the game?

19 A. We should probably check if you are giving an exact
20 quotation. But I think that is the sense of his analysis,
21 yes.

22 Q.101 - All right. And then in order to ensure participation
23 in this game, which means there is a choice of whether or
24 not you can participate, then the rate has to be less than
25 the stand-alone cost to the user of going it alone, is

2 that correct?

3 A. Yes.

4 Q.102 - So the two bookends on the rate as I understand it are
5 incremental costs and stand-alone costs. Would you agree
6 with me?

7 A. Yes.

8 Q.103 - And any rate between those two bookends would be
9 efficient, is that correct?

10 A. That would meet one definition of efficiency. That's
11 right.

12 Q.104 - Well, what other definition of efficiency is there?

13 A. Well, I'm afraid this is a concept which has a number of
14 ramifications. And I think apology. Economists perhaps
15 need to apologize for confusing the language here.

16 There are concepts of technical efficiency, concepts of
17 efficiency, concepts of pricing efficiency. Dr. Ware has
18 referred to at least three different versions in his
19 evidence for example.

20 Q.105 - Well, what version are you referring to when you talk
21 about efficiency in your report?

22 A. The recovery of all of the costs of the resource, the pole
23 or the taxicab ride, without charging more than that, and
24 without having higher total costs than necessary, which in
25 this case would be agreement to share a resource

2 rather than to duplicate it with a second taxicab ride or a
3 second pole.

4 Q.106 - I'm sorry, Dr. Mitchell. I'm confused. I thought we
5 talked about fully distributed costs yesterday. And we
6 agreed that both the proportionate use and the equal use
7 model resulted in a full distribution of cost. Do you
8 agree with that? Because all of the costs of the pole or
9 the resource in general are being allocated over the
10 users, is that correct?

11 A. Yes. When they are allocated in full that is fully
12 distributed cost. And all the costs are recovered.

13 Q.107 - And both Dr. Ware's proportionate use model and your
14 equal sharing model would do that, is that not correct?

15 A. Yes.

16 Q.108 - All right. And I thought we also talked about
17 incremental cost and efficiency yesterday. And I thought
18 you agreed with me that in economic terms if price is
19 equal to or greater than incremental cost then you have
20 satisfied your efficiency requirement in economic terms.
21 In fact that is what -- price equals marginal cost is sort of
22 basic economics?

23 A. Again I apologize for the complications. In a perfectly
24 competitive market price can equal marginal cost. And
25 that price can recover total cost.

2 When there are what we call economies of scale, when costs
3 per unit decrease as the size of the activity increases, a
4 very common situation in regulated industries, then if
5 price equals marginal cost it cannot recover all of the
6 cost. The price has to be marked up someplace to recover
7 the total cost.

8 And so price equals marginal cost is simply not feasible
9 in those situations, a circumstance you encounter
10 throughout electricity generation and distribution for
11 example.

12 Q.109 - All right. Dr. Ware, could we go to page 23 of your
13 report, exhibit A-64?

14 A. I'm sorry. You are addressing me, right?

15 Q.110 - Sorry. Excuse me. Dr. Ware. I apologize. And it is
16 page 23. Dr. Mitchell, it was a long night. One of my
17 kids had to go to emergency. And they are a long way
18 away. I'm very sorry.

19 A. I'm at page 23.

20 Q.111 - Page 23. And we go to line 24?

21 A. Yes.

22 Q.112 - And you say, However, requiring subsidy-free
23 attachment rates that each distributor pay at least its
24 incremental cost will not be sufficient to determine a
25 unique set of rates. In most instances there are many

2 alternative ways that the common costs can be shared while
3 encouraging efficient use of pole resources.

4 And I understood that to mean that if your rate exceeds
5 incremental costs you have satisfied your definition of
6 economic efficiency narrowly defined. But then we have to
7 move on to rules of fairness in order to determine how to
8 allocate the common cost. Did I misunderstand this
9 section of your report?

10 A. No. I think that's a helpful summary.

11 Q.113 - All right. So if we go back to Young's range of
12 rates, we have got the two bookends. We have got
13 incremental costs and stand-alone costs. And then Young
14 proposes what he calls fair sharing rules. Would you
15 agree with that?

16 A. As a characterization I would. I'm not sure he calls them
17 exactly rules.

18 Q.114 - All right. And he applies these rules to solve for
19 rates that satisfy his fair sharing principles or
20 concepts. Would that be correct? He takes his rule, for
21 example equal sharing of the savings is appropriate, and
22 he applies that to some very complicated formulas and gets
23 a result.

24 In this particular case it is not a single result most of
25 the time. It is an area and a bunch of triangles I

2 think. But I don't really want to go there. I just wonder if
3 you agreed with the concept?

4 A. As a general characterization, yes.

5 Q.115 - Now one of the rules that Young proposes is that users
6 share equally in the common costs of a facility, is that
7 correct?

8 A. That is one rule he examines.

9 Q.116 - Is there any economic basis for Young's assumption
10 that equal sharing is fair?

11 A. Yes.

12 Q.117 - What is the economic basis for it?

13 A. When each of the users or services that exploits that
14 resource causes an equal effect on the common cost.

15 Q.118 - But equality, is that an economic principle? The
16 justness of equality, is that something we know about from
17 economics?

18 A. From economics --

19 Q.119 - No.

20 A. -- a given situation, we may be able to determine whether
21 or not each of the participants causes an equal amount of
22 cost. If that is the nature of the cost structure then
23 that's an economic finding.

24 Q.120 - But the notion of the equality per se is not an
25 economic concept, is it?

1 - 3242 - Dr. Mitchell - Cross -

2 A. Well, it's a mathematical concept.

3 Q.121 - And whether or not it is good or not is a

4 philosophical concept, isn't it, if we are talking about

5 equal sharing of a resource?

6 A. Well --

7 Q.122 - It is a value judgment, isn't it? I think you used

8 those words yesterday.

9 A. Value judgments ultimately come into this. But whether

10 something is equal or not is a matter of fact. And there

11 is no value judgment involved in that.

12 Q.123 - All right. Now you discussed in your evidence

13 yesterday your oral presentation a pipeline example, is

14 that correct?

15 A. Yes.

16 Q.124 - This example wasn't in your prefiled evidence was it?

17 A. No.

18 Q.125 - Do you recall that in his chapter Young discusses a

19 shared water distribution example?

20 A. Yes.

21 Q.126 - And are you aware that Young expresses the view in the

22 chapter that a per town division of common costs might not

23 be appropriate?

24 A. Yes. He examines that. He examines several alternate

25 ways to share that resource.

2 Q.127 - And in fact one of the things he proposes is that it
3 might be fair to allocate on the basis of population
4 rather than per town, is that correct?

5 A. Yes.

6 Q.128 - And in fact if we look at gas pipelines would you
7 agree that the approach typically used by regulators is to
8 allocate common cost based on the volume of gas that each
9 user has contracted for?

10 A. I don't have specific knowledge of gas pipelines. So I
11 can't speak to the facts of your example.

12 Q.129 - All right. But you would agree with me that when we
13 for example go from a per town basis to a per population
14 basis we are choosing a different measure of usage.
15 We are choosing a different allocation measure in order to
16 approximate usage of the common resource more fairly.
17 Would you agree with that? So instead of being per town
18 we go per capita. And we do that because we think it is a
19 fair representation of the usage of the common resource.
20 Would you agree with that?

21 A. I would agree that it is a different representation and it
22 leads to a different allocation. Whether you go to a
23 different allocation because of your view about use is a
24 separate question.

25 Let me extend your example if I may. Instead of

2 allocating by number of people in the town, we could allocate
3 by their income, their ability to pay. That would lead to
4 a different allocation of the common resource. We could
5 count children as smaller consumers than adults. And that
6 would lead to a still different allocation.

7 The simple point is there are a number of possible
8 allocations to this problem. There is no simple single
9 solution that is uniquely correct. But to infer that
10 population is tantamount to usage is an additional
11 assumption.

12 Q.130 - Agreed. So what you are saying is there is no simple
13 solution to the allocation problem, is that correct?

14 A. Yes. We have said that in the report, that there are a
15 number of contending solutions to allocating the common
16 resource.

17 Q.131 - And in fact in this pipeline example, when you go to a
18 per town division, which would divide the common cost in
19 half to a per capita division, which I don't know how it
20 might divide, you are going from a totally different
21 allocation of a common resource, is that correct?

22 A. You are going to a different allocation.

23 Q.132 - You are going to get a very different rate structure,
24 are you not?

2 A. You would get a different rate structure. Professor Young
3 examines a number of alternatives. Some of them divide
4 all of the costs equally as you suggest. Others look at
5 only the savings that are obtained by cooperating and
6 divide those on some basis. Others allocate costs in
7 relation to stand-alone costs.

8 And I think as we have indicated in our report, each of
9 those is a contending measure. And each has some appeal
10 to basic fairness principles.

11 So from that one needs to go on and say well, what are the
12 facts of the costs of the particular application that you
13 have, in this case the joint use pole. And for that model
14 relative use simply doesn't fit the facts.

15 Q.133 - Okay. We are going to get to that later. But for
16 current purposes I think we are agreed that the allocation
17 question is not a simple one?

18 A. Yes, we are.

19 Q.134 - All right. Now I believe Young also proposes
20 determining rates based on Ramsey prices, is that correct?

21 A. Again I'm not sure I would say that he proposes that. But
22 he certainly examines in some detail the use of so-called
23 Ramsey prices for allocating common costs.

24 Q.135 - And we are not -- you are not proposing to set the
25 pole rental rate based on Ramsey pricing are you?

2 A. I have not examined Ramsey pricing in this report.

3 Q.136 - Thank you. Now I want to discuss for a bit what you
4 call the empirical evidence, which is the negotiated
5 powerco, telco splits. Now before we turn to the formulas
6 in your written report, I wonder if you can help me with
7 the revised version of the revenue-sharing formula used by
8 Disco from 1997 until sometime in 2004.

9 Did you have a chance to look at the revised page of the
10 joint use agreement that was filed by Disco yesterday, Dr.
11 Mitchell?

12 A. I did not see it, no.

13 Q.137 - Could someone provide you with a copy of it?

14 MR. RUBY: Mr. Chairman, perhaps Ms. Milton can go on to
15 another line of questioning. And we will find that page
16 for Dr. Mitchell.

17 MS. MILTON: Actually I would like to proceed. I can give
18 him my copy if you would like.

19 CHAIRMAN: Well, we have a number of them up here.

20 Q.138 - Now the revised page provides -- there are lines there
21 for capital recovery tel, capital recovery power. Do you
22 see those, Dr. Mitchell? They have got an asterisk beside
23 them.

24 A. Yes.

25 Q.139 - As I understand it capital recovery would relate to

2 their investment in the capital cost of the pole. Would that
3 appear to make sense to you? That would be the capital in
4 issue here because we are talking about poles.

5 A. Well, it certainly refers to capital. But without the
6 associated documentation and a chance to review it I can't
7 comment as to exactly how it applies.

8 Q.140 - All right. Would you agree with me that in this
9 revised formula we have the same amounts of capital
10 recovery for telephone as for power, \$3.11 for each of
11 them?

12 A. I'm sorry. In whose formula?

13 Q.141 - This revised page --

14 A. The revised --

15 Q.142 - -- the amounts for capital recovery for telephone and
16 for power are the same?

17 A. They are the same, \$3.11 as shown in each column.

18 Q.143 - Now my understanding is that under the 1996 joint use
19 agreement it was agreed that Aliant would own 43 percent
20 of the poles and Disco would own 57 percent of the poles.
21 Is that consistent with your understanding?

22 A. That is.

23 Q.144 - So if the capital is the capital in the poles and
24 Aliant invested 43 percent of the capital and Disco
25 invested 57 percent of the capital, can you explain to me

2 why we would see a 50/50 division of the capital recovery in
3 this formula?

4 A. Without reviewing more of the documentation and its
5 application to the poles, I simply can't say.

6 Q.145 - All right. Thank you. I wonder if we could go to
7 page 12 of your report where you apply the three sharing
8 rules to the scenario where there is a powerco and a telco
9 user at a pole?

10 MR. MACNUTT: Mr. Chairman, I hate to interrupt Ms. Milton.

11 But we have now referred to this revised page joint use
12 policies and procedures document several times.

13 For absolute certainly on the record as to what document
14 and what page is being referred to, I would recommend that
15 the page just used in the cross examination be marked as
16 an exhibit.

17 CHAIRMAN: Well, Mr. MacNutt, a simpler suggestion -- and I
18 agree with you bringing it to our attention at this time
19 -- is that that is a replacement page for page I-26 in
20 an existing exhibit. And that is which one?

21 MS. MILTON: It is in our evidence RCC-1. And I believe it
22 was Appendix K. I could have the wrong appendix. We
23 would like to have the original page and the revised page
24 on the record. But if we could just put the revised page
25 on top in that appendix.

2 CHAIRMAN: One will be 126(a) and the other (b)?

3 MS. MILTON: Yes. That would be great. And it is Appendix
4 K of RCC-1.

5 CHAIRMAN: Okay. The replacement will be 126(a) because
6 that is now the operative one. And the page which was
7 replaced will be 126(b). So that is how we will refer to
8 them in the future. And we were looking for what page in
9 --

10 MS. MILTON: Page 12 of Exhibit A-64.

11 Q.146 - Now this is where you applied your three fair sharing
12 rules to a two-user world where you have the telephone
13 company and the power company, is that correct?

14 A. That's correct.

15 Q.147 - And in each case you allocate two feet of
16 communication space to the telephone company, is that
17 correct? When you apply the rule in each case you
18 allocate the two feet of communication space to the
19 telephone company?

20 A. The example assumes that two feet of space are dedicated
21 to communications.

22 Q.148 - So in effect the telephone company is assumed to pay
23 for the full two feet of communication space, would that
24 be correct?

25 A. Well, it uses -- it has dedicated for its use two feet

2 of space. And what it pays is the result of the various cost-
3 sharing rules.

4 Q.149 - All right. So the telephone company pays for the two
5 feet of dedicated space. The power company pays for its -
6 - I believe it is nine feet of dedicated space. And then
7 they share the rest of the space equally.

8 Would that be correct under your approach? I mean, that
9 would be rule 1 if we look at sharing of the costs
10 equally. Rule 2 would be looking at sharing of the
11 savings equally.

12 A. Yes. Each -- the telephone company and the power company
13 make common use of the common space, the rest of the pole.

14 Q.150 - And the two feet is attributed to the telephone
15 company, correct?

16 A. Yes.

17 Q.151 - Do your calculations recognize the potential for Disco
18 to earn rents from a third party tenant that uses the
19 communication space?

20 A. Well, these examples are simply for two users, the power
21 and the telephone company.

22 Q.152 - I agree, Dr. Mitchell. But you are using these to say
23 that the negotiated arrangements corroborate your rule.
24 So you have done these calculations to show what would

2 happen in a two-user world. And then you said we get results
3 that are similar to what is being negotiated. So that is
4 why we are looking at these two-user world to go through
5 that.

6 So would you agree with me that the two feet of
7 communication space is allocated in your formulas to the
8 telephone company?

9 A. Yes, it is.

10 Q.153 - Would you agree with me that those formulas do not
11 recognize that Disco might itself earn revenues from the
12 communication space?

13 A. Yes.

14 Q.154 - All right. Are you aware that since 1996 Disco has
15 earned revenues from the communication space?

16 A. Yes. Not of the specifics but of the general idea.

17 Q.155 - All right. And perhaps you are not aware. But are
18 you aware that they were receiving a portion of \$9.60 per
19 pole?

20 A. Again I'm not clear about the specifics.

21 Q.156 - All right. Would you agree with me if they were
22 receiving a portion of \$9.60, if they get a rate that is
23 in the order of \$30, the revenues from their communication
24 space would go up substantially?

25 A. If you could just repeat that. I didn't get the

2 numbers in my head.

3 Q.157 - If they were getting 9.60 per pole or some portion of
4 9.60 per pole, and now the rate that this Board determines
5 goes up to \$30 per pole or in that order of magnitude,
6 would you agree with me that their revenues from the
7 communication space would be going up significantly?

8 A. Both the 9.60 and the \$30 are revenues from communication
9 space.

10 Q.158 - Well, they would be the pole rental revenues, yes. So

11 --

12 A. Well, an increase from 9 to 30, yes, is a significant
13 increase. I agree with that.

14 Q.159 - Are you aware that Disco places transformers in the
15 separation space on a joint use pole?

16 A. I have heard that testimony.

17 Q.160 - In this situation would you agree with me that Disco
18 is using some of the separation space for its own
19 facilities?

20 A. Yes.

21 Q.161 - Would you agree with me that that is a benefit to
22 Disco?

23 A. Yes.

24 Q.162 - Are you aware that Disco places streetlights in the
25 separation space on its poles?

2 A. Yes, or the attachments for the streetlights, right.

3 Q.163 - Are you aware that Disco earns revenues from the power
4 supply to these streetlights?

5 A. I imagine it does. It supplies the power.

6 Q.164 - All right. And when Disco places its streetlights in
7 the separation space it is in fact getting more value from
8 the separation space than the mere ability to share the
9 pole with a communications user. Would you agree with
10 that?

11 A. Once again the question please?

12 Q.165 - Would you agree with me that when Disco places
13 streetlights in the separation space it is getting more
14 value from the separation space from the mere ability to
15 share poles with communications users?

16 A. It is getting a benefit as compared with leaving the
17 separation space vacant.

18 Q.166 - All right. Now if the poles -- excuse me, if the
19 streetlights are sold by Disco to a third party there
20 would be in effect another user of the pole. Would you
21 agree with that?

22 A. Yes, I guess the streetlight company or municipality or
23 whatever would be identified as a separate user.

24 Q.167 - So under your equal sharing approach, in that case the
25 common costs would now have to be allocated amongst an

2 additional user. So if we have -- say we have Rogers, Aliant
3 and Disco on the pole, we would now have to go from three
4 users to four users and allocate the common costs amongst
5 four users. Would you agree with that?

6 A. As a general proposition.

7 Q.168 - Would you agree with me that in practice nothing has
8 changed in terms of the usage and benefits flowing from
9 the pole? All we have done is change the ownership of the
10 streetlights?

11 A. Yes, if the same attachments are there, just the ownership
12 has changed.

13 Q.169 - Thank you, Dr. Mitchell. Can Aliant place attachments
14 in the power space?

15 A. In the dedicated space for power?

16 Q.170 - Yes.

17 A. My understanding of the standards is no.

18 Q.171 - Is Aliant earning any revenues from third party use of
19 the power space on its poles?

20 A. Well Aliant and Disco in their negotiated arrangement of
21 sharing of -- or dividing ownership of power poles means
22 that over the province as a whole, pole revenues for both
23 types or all types of attachments flow to both of the
24 owners of the poles.

25 Q.172 - All right. But we have established that Disco is

2 earning revenues from the communication space. And my

3 question was intended to determine whether you were aware

4 of whether or not Aliant earns revenues from the power

5 space. Do you know whether or not that is the case?

6 A. I don't know that it is.

7 Q.173 - All right. Now you refer in your evidence to the OEB

8 decision. Is that correct?

9 A. Yes.

10 Q.174 - Now would you agree with me that the OEB included the

11 separation space as space that is dedicated to the

12 communications user? When it established its pole rental

13 rate, it assumed that the separation space was dedicated

14 to communications?

15 A. Yes, I believe that is how they characterized their final

16 decision or allocation formula.

17 Q.175 - And that is in fact how they did their calculation to

18 get to a pole rental rate?

19 A. I would need to review that but that is my memory --

20 consistent with my memory.

21 Q.176 - All right. Now I am going to refer to a few numbers

22 but I assure you this is going to be simple. Now I

23 understand that Disco has proposed in New Brunswick that

24 on a typical 40 foot pole, there are two feet of

25 communication space, four feet of separation space and

2 nine feet of power space for a total I believe of 15 feet.

3 Does that sound right to you? 2 plus 4 plus 9?

4 A. Yes.

5 Q.177 - And then the OEB said that the communication space and

6 a separation space was communications dedicated space so

7 they allocated -- of that dedicated space, they said 2

8 plus 4 or 6 feet was dedicated to communications users?

9 Is that correct?

10 A. Well I don't believe they used the numbers that you --

11 Q.178 - No, but if they would have assumed that the 2 feet

12 plus the 4 feet were communications space. Would you

13 agree with that under the OEB approach?

14 A. Well if you take OEB's approach and apply it to these

15 numbers, I think you get that result.

16 Q.179 - All right. So if the communication space was 6 out of

17 15 of the -- so the dedicated space totalled 15,

18 communications was allocated 6, by my calculation that is

19 40 percent of the dedicated space. Does that sound about

20 right to you? 6 out of 15?

21 A. Yes.

22 Q.180 - And would 40 percent -- would you agree with me that

23 under a proportionate use model such as proposed by Dr.

24 Ware, you would then on that calculation allocate 40

25 percent of the poles to the telephone company? Because we

2 have calculated the portion of the dedicated space that is
3 communications?

4 A. We are now -- you are now allocating poles or the cost of
5 the poles or --

6 Q.181 - Well we are using a methodology where we are using --
7 we are allocating costs based on space allocation on the
8 pole. I don't think that is a point in contention. So I
9 guess I am doing both. But so the approach is we have
10 allocated costs on the basis of the share of the space.
11 So the proportionate use approach would say that 40
12 percent -- communications users have 40 percent of the
13 dedicated space on the pole so they should pay for 40
14 percent of the poles. Would you agree with that?

15 A. I think that is the thrust of the relative use approach.

16 Q.182 - All right. And that would be -- 40 percent would be
17 exactly what NBTel and NB Power negotiated in 1967, would
18 you agree with that? That NBTel would own 40 percent and
19 NB Power would own 60 percent of the poles? Is that
20 consistent with your understanding?

21 A. It is my understanding that those are the percentages they
22 negotiated, not that they reached that -- those
23 proportions by using the OEB formula.

24 Q.183 - No, but that's what they negotiated and you are

2 proposing that your formulas get -- are corroborated by the
3 empirical evidence. Is that correct, Dr. Mitchell?

4 A. Yes.

5 Q.184 - All right. Now I take it that you do not agree that
6 the OEB should have allocated the separation space
7 entirely to communications users. Is that correct?

8 A. Yes, I disagree with that allocation.

9 Q.185 - So the OEB got that part wrong?

10 A. Well let's put it this way. I have -- Dr. Yatchew and I
11 have proposed ways of thinking about cost allocation that
12 would identify the separation space as a common resource.

13 And that is an important difference from the OEB's
14 formula. But I wouldn't necessarily characterize it as
15 right or wrong.

16 Q.186 - All right. And that is because in your exanthemata
17 the power company also benefits from the separation space
18 since without it it could not share the poles with
19 communications users. Is that correct?

20 A. That is correct.

21 Q.187 - And so if there weren't the separation space, the
22 power company couldn't benefit from sharing. Is that
23 correct?

24 A. None of the parties could benefit.

25 Q.188 - Agreed. Now would you agree with me that your

2 calculations on page 12 of your report, exhibit A-64, assume
3 that the cost per foot of a pole does not vary with pole
4 height?

5 A. Yes, I believe we said that explicitly. But in any case I
6 agree with that.

7 Q.189 - Are you aware of any instances when a communications
8 company would require a pole that is more than 30 feet?

9 A. Well I am certainly aware of testimony that poles
10 sometimes need to be at considerable height because of
11 topographic requirements crossing ravines and so on.
12 Whether that would lead to greater than 30 feet for a
13 telephone only pole, I don't know.

14 Q.190 - But in general we know that the communication space is
15 always 2 feet, don't we?

16 A. Under the standards, joint use standards, the dedicated
17 space for communications is 2 feet.

18 Q.191 - Have you ever heard of a joint use pole that had a
19 different amount of space allocated to communications?

20 A. I'm not aware of one in Canada and I don't know how that
21 applies more widely.

22 Q.192 - All right. Are you aware that Disco constructs poles
23 that are as tall as 55 and 60 feet?

24 A. Yes, I have heard that testimony.

25 Q.193 - Are you aware that the cost evidence filed by Disco in

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this proceeding shows that the cost per foot of a pole increases substantially between a 30 foot pole and a 55 foot pole?

A. Yes, I heard that.

Q.194 - Are you aware that power attachments are typically heavier than communications attachments on a pole?

A. Yes, in a general way.

Q.195 - Are you aware that telephone company attachments, in particular copper cable, are typically heavier than the coax cable that is used by cable companies?

A. I really don't know what the comparative weights of different communications cables and technologies would be.

Q.196 - All right. Would you agree with me that heavier attachments are likely to require a sturdier pole design?

A. Not necessarily.

Q.197 - Perhaps we could go to page 11 of your evidence.

Exhibit A-64. And if we start at line 28, do you see that, Dr. Mitchell?

A. Yes.

Q.198 - And you say that power companies bear somewhat larger share of common costs because there attached require more dedicated space and sturdier pole design than those of telephone companies.

So you would agree with me then that power companies

2 do require a sturdier pole design than communications
3 companies?

4 A. I think that's no doubt true in at least in some
5 circumstances. Whether it's true for every pole, I just
6 don't know.

7 Q.199 - All right. Now I believe you have indicated elsewhere
8 in your report that in practice poles only come in 5 foot
9 increments, is that correct?

10 A. That's my understanding.

11 Q.200 - Do your calculations on page 12 reflect that fact?

12 A. The calculations are essentially based on a continuously
13 adjustable length of pole.

14 Q.201 - Right. So you use things like 27 feet for the
15 telephone company. You don't go up to 30 feet, which
16 would be the 5 foot increments?

17 A. Yes. The calculation is done in integral number of feet.

18 Q.202 - All right.

19 A. Or actually maybe even smaller increments.

20 Q.203 - All right. Now if we could just look at Rule 2 for a
21 minute. As I understand Rule 2 is you allocate equally
22 the savings realized from a joint use pole relative to
23 stand-alone support structures, would that be correct?

24 A. Yes.

2 Q.204 - Are there data on the record of this proceeding on the
3 stand-alone costs of telco only and power only poles?

4 A. I don't know the answer to that.

5 Q.205 - You haven't seen that data then?

6 A. There may be data on power only poles in Disco's evidence.

7 Because there is quite a bit of data on costs of poles at
8 various heights and so forth.

9 Q.206 - What about telco only poles?

10 A. The evidence that I can recall seeing is from Disco's
11 records. And in these sorts of calculations, we have used
12 analogies to cost of poles that would come from Disco
13 records.

14 Q.207 - When you applied Rule 2, you didn't have any data on
15 the stand-alone costs of a power company pole and a stand
16 alone-costs of a telco pole that you used when you
17 calculated your application of that Rule 2, would that be
18 fair?

19 A. The calculations are actually illustrated here on page 12.

20 And as you can see, they begin from assumptions about the
21 height of a pole and the cost of a pole being
22 proportionate to its height. So to that extent this is
23 entirely a pencil and paper exercise based on assumed
24 costs and not related to costs of real world poles of any
25 type.

2 The sharing percentages that result from that calculation
3 were then applied to actual pole costs.

4 Q.208 - All right. And if we look at Rule 3, as I understand
5 it, that rule allocates the shared cost of a pole in
6 proportion to each users' share of the aggregate cost of
7 stand-alone pole networks, would that be correct?

8 A. Yes.

9 Q.209 - And again you didn't have actual data on the stand-
10 alone costs of the telco and a power network when you
11 applied that rule in this case, did you?

12 A. Yes, that's the same answer.

13 Q.210 - Would you agree with me that there are many factors
14 that might have influenced the joint use negotiations
15 between NB Tel and NB Power?

16 A. Yes.

17 Q.211 - So there might be any number of factors that could
18 have affected NB Tel's desire to own poles and NB Power's
19 desire to own poles?

20 A. There might be a number of factors, sure.

21 Q.212 - So for example, different costs of capital might have
22 affected how many they would want to own?

23 A. That's a possible factor.

24 Q.213 - Different productivity costs of sharing might have
25 affected how many poles they want to own?

1 - 3264 - Dr. Mitchell - Cross -

2 A. Possibly.

3 Q.214 - Different regulatory regimes might have affected how
4 many poles they wanted to own?

5 A. Possibly.

6 Q.215 - Do your calculations recognize any of those factors?

7 A. The calculations stand on their own assumptions really as
8 I have said of pole height and cost of pole being in
9 proportion to length. Their application is supported by
10 the longstanding evidence that there have been relatively
11 stable sharing relationships that are consistent with the
12 shares indicated by these alternative rules.

13 Q.216 - Well that would only be true, Dr. Mitchell, would it,
14 if the assumptions which underpin your calculations are in
15 fact correct, wouldn't it?

16 A. I missed the question.

17 Q.217 - The ability of your formulas to indicate what has
18 happened in the real world is only true if the assumptions
19 that underpin them are correct, would you agree?

20 A. No. I would look at this as a real world experience
21 indicating evidence that can suggest the relevance of
22 particular theoretically designed -- theoretically derived
23 relationships.

24 Q.218 - Well there is no question what the real world
25 ownerships splits are, would you agree, Dr. Mitchell? We

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2 are all agreed that they were 40/60 and they went to 43/57
3 percent?

4 A. Yes.

5 Q.219 - And the question here is is whether the empirical
6 evidence, those ownership splits corroborate your fair
7 sharing rule, isn't that the issue?

8 A. Whether they are consistent with and lend support to those
9 sharing rules.

10 Q.220 - And if the assumptions which underpin your rules
11 aren't correct how are they corroborating the real world?

12 A. I am sorry, I think it goes the other way. It is the real
13 world evidence that is potentially able to corroborate
14 results that are derived from in effect systematic thought
15 experiments.

16 Q.221 - But I could propose a formula that gets you to 40
17 percent, but unless that formula has a basis in what's
18 going on, what does that formula tell me?

19 A. I am sorry. I haven't understood the question.

20 Q.222 - I could propose a formula that gets me to 40 percent.

21 I could say I have got a rule, 20 percent for common and
22 20 percent for dedicated. And I add that up and I say 40
23 percent, because that's my rule for what the telco is
24 going to pay. What's the relevance of my formula?

25 A. The test of a proposed rule or a formula as you

2 suggest, really would be how it performs in a variety of
3 applications. If your formula is simply 20 here and 20
4 there equals 40, it's going to do a terrible job if you
5 apply it to a very different type of pole allocation or a
6 different sharing of common resources.

7 Q.223 - All right. Let's move on, Dr. Mitchell. I would like
8 to ask one more question before perhaps we could break.
9 Are you aware that in his evidence Tony O'Hara has said
10 that power uses only 4.9 feet of space on a 40-foot pole?

11 A. I recall that he said something regarding the use of space
12 and that 4.9 was in some instances the amount that was
13 used. I don't remember its applicability.

14 Q.224 - All right. I am going to round up to 5 on that 4.9
15 for the purposes of some simple calculations. So if we
16 use Disco's pole allocations we have for a power only
17 pole, we have 6 feet of buried space, 19 feet of clearance
18 space and 5 feet of power space. And I believe that gets
19 us to 30 feet. It would have been 29.9, but I rounded up.

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21 And then for the telephone company pole, we would have
22 just the telephone company. We would have 6 feet of
23 buried space, 19 feet of clearance space and 2 feet of
24 communication space for the 27 feet that you have used in

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2 your calculations. But poles don't come in 27 feet. So the
3 telephone company would have to put in a 30 foot pole.

4 Would you agree with those calculations?

5 A. Well, I agree that you get those total pole lengths. And
6 when you round 27 to 30, you get 30, yes.

7 Q.225 - All right. And the shared pole is going to be 6 feet
8 buried space, 19 feet clearance space, 2 feet
9 communications space, 4 foot separation space and 5 feet
10 power space. So the total I get for that is 36 feet for
11 the total pole. But again poles don't come in 36 feet, so
12 the joint use pole has to be 40 feet. Have you calculated
13 your Rules 1, 2 and 3 using these pole sizes?

14 A. No.

15 Q.226 - Would you be surprised to hear that if I re-calculate
16 Rule 1 with those pole sizes, I get that the telephone
17 company should own 46 percent of the poles. And if I re-
18 calculate Rules 2 and 3, I get that the telephone company
19 should own 50 percent of the poles? I think the last two
20 are logical because they are both having to build on their
21 own a 30 foot pole.

22 A. Now, you know, just hearing this it sounds like your
23 mathematics is correct.

24 Q.227 - All right. Thank you.

25 MS. MILTON: I think now would be a good time to take a

2 break, Mr. Chairman.

3 MR. RUBY: Mr. Chairman, before we break -- and I didn't
4 want to interrupt Ms. Milton until she was finished this
5 line of questioning, but she started it with an assumption
6 about Mr. O'Hara's evidence without taking the witness to
7 the evidence. It doesn't say what she says it says.
8 So I don't know if she wants to point that out to the
9 witness or take him it to him, but --

10 MS. MILTON: I will find the reference after the break if
11 you want the reference?

12 CHAIRMAN: We will take our break.

13 (Recess - 10:35 a.m. - 10:50 a.m.)

14 CHAIRMAN: I guess we need more time to work out the
15 logistics on the 1st of March. So if there is nothing
16 preliminary, why go ahead, Ms. Milton.

17 MS. MILTON: All right. I can provide those cites to the
18 witness. We were referring to Tony O'Hara's evidence and
19 the fact that he indicated that Power needs 4.9 feet. In
20 Appendix -- Exhibit A-63 at page 24 starting at line 14.

21 MR. TINGLEY: Is that A-63?

22 MS. MILTON: A-63. I'm sorry. Did I say the wrong number?

23 MR. TINGLEY: No.

24 Q.228 - And so the line reads, the space typically used for
25 power poles on a 40-foot pole is 4.9 feet. And then there

2 is also a cite to the transcript yesterday. I don't know if
3 you want to go there as well. But it is the transcript
4 for January 25th 2006 at page 3125, line 18.

5 Given those references, Dr. Mitchell, is there anything
6 you wanted to add to your earlier response?

7 A. Ms. Milton, I don't recall in detail what my response was
8 except that I said I didn't have a detailed understanding
9 of what Mr. O'Hara's testimony and evidence was on this
10 point.

11 But reading it here now, I see the 4.9 feet for many types
12 of configuration and somewhat more for another orientation
13 on the pole. And that for ratemaking purposes Disco
14 applies a power space at 9 feet.

15 And so those appear to account for both the 4.9 feet and
16 the 9 feet figures that we have been discussing.

17 Q.229 - Right. So the 4.9 is the actual requirement. And you
18 may not have the transcript. Do you have a copy of the
19 transcript?

20 A. I do.

21 Q.230 - So if you go to 3125 of yesterday's transcript. And
22 starting at line 18 Mr. O'Hara said "Our construction
23 standard requires 4.9 feet, that's correct."

24 And then the question was "And would you agree with me
25 that sometimes Disco requires more than 4.9 feet on a

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pole?" And he said, 98 percent of what we construct out there is single phase and standard phase, standard three-phase construction. And both those construction types require approximately 5 feet on the pole. Do you see that?

A. Yes.

Q.231 - All right. Now Dr. Mitchell, you assert in your evidence that all users of a Disco pole benefit equally from the buried, the clearance and the separation space, is that correct?

A. Yes.

Q.232 - And that premise is based on the fact that a stand-alone pole has to have buried and clearance space, and that in order to benefit from sharing, a pole has to have separation space. Would that be correct?

A. Yes.

Q.233 - Now we have already discussed the evidence that the per foot cost of a pole increases with pole height. I think we talked about that earlier this morning. Now if a communications pole is typically only 30 feet, and power poles are sometimes higher than that, would you agree with me that on the taller poles that cost of the clearance separation and buried space is higher than the cost that you would have on a communications only pole? You would

2 have the same amount of space but the per foot cost is higher?

3 A. If the per foot cost of the joint use pole is higher than
4 the per foot cost of the stand-alone pole -- I believe it
5 was a communications pole that you were comparing -- then
6 a given number of feet on the joint use pole would have a
7 higher cost.

8 Q.234 - All right.

9 A. And that would apply to the buried and clearance spaces.

10 Q.235 - All right. Are you aware that the amount of buried
11 space on a pole increases as the pole gets taller?

12 A. I believe I recollect testimony that in some circumstances
13 increased depth for the pole is required for higher poles.
14 I don't know how widely that applies.

15 Q.236 - All right. Thank you. Are you aware that Aliant has
16 priority access to the communication space and that Disco
17 has sole access to the power space on joint use poles?

18 A. Yes.

19 Q.237 - Would you agree with me that if priority access is a
20 benefit that Rogers does not get the same value from the
21 communication space as Aliant?

22 A. Not necessarily.

23 Q.238 - But we know that Aliant has sought priority access.

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2 And presumably it has done so because it sees some value in
3 it. Would you agree with me?

4 A. That's a reasonable presumption.

5 Q.239 - All right. Are you aware that Aliant and Disco
6 dictate where Rogers can put its facilities on a joint use
7 pole?

8 A. My recollection of yesterday's testimony is that the
9 standards for joint use are the principal factors that
10 determine restrictions on where communications users can
11 place their attachments.

12 Q.240 - Well, we are talking about within the communication
13 space, so where Rogers goes in that two feet?

14 A. Yes. Well, again I'm just going by my recollection that
15 there is a need to coordinate attachers when there is more
16 than one in the space, and that that responsibility is
17 assigned to -- I believe it's Aliant in the case of this
18 agreement.

19 Q.241 - All right. And would you agree with me that if there
20 are additional costs to Rogers because of where it is
21 required to place its facilities on the pole, then Rogers
22 does not receive an equal benefit from the communication
23 space on the pole?

24 A. No.

25 Q.242 - Why not?

2 A. As a result of engaging in the joint enterprise, it may be
3 that one or two or all parties incur additional costs or
4 disadvantages relative to what they would have if they
5 were the sole determinant of their use of the resource.

6 Q.243 - All right. But if we assume for example that Aliant
7 always attaches on the road side of the pole, and just
8 assume that there are advantages to that, if Rogers has to
9 attach on the back side of the pole, and there is a
10 disadvantage to attaching to the back side of the pole,
11 would Rogers be receiving the same benefit from the
12 communication space as Aliant?

13 A. Well, on those assumptions it would not.

14 Q.244 - All right. Can Rogers obtain pole rental revenues
15 from Disco's poles? I think the answer is simple. Sorry.
16 It wasn't meant to be a trick.

17 A. I really don't know.

18 Q.245 - All right. Other than safety restrictions and Disco's
19 obligations to Aliant, are there any restrictions on where
20 Disco can place its facilities on a Disco pole?

21 A. Well, there is certainly all the safety and --

22 Q.246 - Agreed.

23 A. -- other standards, yes.

24 Q.247 - Agreed. Are you aware of any other restrictions other

2 than safety and what it is required to do under its joint use
3 arrangement with Aliant? Are you aware of any other
4 restrictions?

5 A. On the Disco-owned poles, is it?

6 Q.248 - Correct.

7 A. No, I'm not.

8 Q.249 - All right. I'm going to turn to the issue of vacancy
9 risk. And I believe your evidence is that to the extent
10 there are benefits of ownership you believe they are
11 offset by vacancy risk, is that correct?

12 A. Broadly speaking, yes.

13 Q.250 - All right. And I think you confirmed yesterday that
14 it was your understanding that there is always two feet of
15 communication space on a joint use pole, is that correct?

16 A. Any joint use pole that's built to the standards I
17 understand has to have two feet of communication space.

18 Q.251 - And there is always a separation space on a joint use
19 pole, is that correct?

20 A. Yes.

21 Q.252 - So what additional capital cost does Disco incur in
22 order to have Rogers rent space on the pole?

23 A. To answer this question you start from a situation where a
24 joint use pole is just one alternative. Disco could build
25 a pole solely to its own requirements.

2 Q.253 - All right. But Disco has agreed to use joint use
3 poles with Aliant, correct?

4 A. Yes.

5 Q.254 - And because of that Disco builds poles with two feet
6 of communication space and a separation space, correct?

7 A. Yes.

8 Q.255 - And in return for doing that Disco gets to use
9 Aliant's poles at no charge, is that correct?

10 A. That's right. There are no financial transfers between
11 Disco and Aliant.

12 Q.256 - And in fact that is what your formulas do then when
13 you -- or the 43 percent, 57 percent represents the return
14 -- let me rephrase this.

15 In return for investing in joint use poles, Disco gets
16 access to Aliant poles. And that is the return, is it
17 not, on that investment?

18 A. Well, it is a benefit of investing capital on the poles,
19 yes.

20 Q.257 - All right. And if there were no Rogers we would still
21 have the same joint use arrangement, wouldn't we? In fact
22 there was no Rogers in 1967.

23 A. Right. Although the joint use arrangement anticipated the
24 opportunity for other attachers in the communication
25 space.

2 Q.258 - What kind of competition was there in the
3 telecommunications markets in 1967, Dr. Mitchell, in
4 Canada?

5 A. I can't give you the facts on that.

6 Q.259 - All right. Do you have any knowledge of the status of
7 the cable industry in Canada in 1967?

8 A. Nothing specific.

9 Q.260 - All right. Can you identify any technological change
10 that you think is likely to reduce cable use of poles?

11 A. Radio.

12 Q.261 - But cable is inherently a wireline transmission
13 mechanism?

14 A. Yes.

15 Q.262 - How would radio reduce cable use of poles?

16 A. Well, we have examples of telecommunications users who are
17 going from wire line to wireless technology.

18 Q.263 - So you are assuming that cable is not going to exist?

19 A. I'm not assuming anything. You asked me for an example,
20 if I could imagine.

21 Q.264 - All right. I believe in your evidence you suggested
22 that the economic lifetime of Disco's poles was likely
23 longer than the cable usage of those poles. And so I'm
24 wondering how you came to that conclusion?

25 A. Well, I can imagine a world in which broadband

2 wireless communications becomes a competitive alternative to
3 wire line broadband communications. In such a world it
4 might well be that cable suppliers would face effective
5 competition from a non-cable, non-attached or a lesser
6 attached technology.

7 Q.265 - But if you have competition don't you still have the
8 cable and then they are just competing with someone else?

9 A. If the two competitors are both viable, they would be
10 competing --

11 Q.266 - Do you have any --

12 A. -- it could be that one technology would ultimately
13 displace another.

14 Q.267 - Do you have any evidence to suggest that cable
15 technology is going to be displaced by wireless
16 technology?

17 A. I was attempting to answer a question about whether I
18 could imagine technologies. And I think the evidence from
19 telephone communication is one can certainly very well
20 imagine new technologies in a rapidly developing field
21 displacing traditional technologies.

22 Whether this will occur in broadband cable services is of
23 course an open question, but I think it is imaginable.

24 Q.268 - Can you put a probability on it?

25 A. In 32 years? No, I can't give you a number but it is

1
2 certainly greater than zero.

3 Q.269 - Are you aware that third party use of poles is
4 expected to increase with rising competition in
5 communications markets?

6 A. There certainly are forecasts that are characterized by
7 that, yes.

8 Q.270 - All right. Would you agree with me that if Disco
9 earns pole rental revenues from poles that are fully
10 depreciated so they are no longer in its cost data, then
11 Disco would effectively be earning a windfall on those
12 poles?

13 A. I suppose you could characterize if you could attribute
14 revenue to a particular pole that had been fully
15 depreciated, then that revenue, if you want to
16 characterize it, is a windfall. It is providing revenue
17 in excess of the cost of that particular pole.
18 But of course across the network there are poles of
19 varying ages. There are poles that are no longer on the
20 books because of needs to relocate them or accidents that
21 have removed them from service and so on before their full
22 life and cost recovery has occurred.
23 So one needs to look at this question more broadly than
24 for a single long line pole.

25 Q.271 - All right. So doesn't that mean that you should look

2 at the actual current costs of poles on Disco's books in order
3 to get a pole rental rate?

4 A. The methodology that has been discussed for application of
5 cost sharing has been based on net embedded cost of the
6 poles and current operating costs.

7 Q.272 - All right. Now I believe you state in your evidence
8 that the rate you are proposing is low and one of the
9 reasons you give for this is that Disco assumes the cost
10 of wastage on the pole that results from the fact that
11 poles come in 5 foot increments only.

12 Does that sound correct? I believe it is page 17 of your
13 evidence at footnote 11, if you want the reference. That
14 is exhibit A-64.

15 A. Yes, I see the footnote.

16 Q.273 - Would you agree with me that as long as the height of
17 a pole required by Disco for its own use is -- as long as
18 that pole height is not divisible by 5, then Disco when it
19 constructs its own poles would have to bear the costs of
20 some waste space on the pole?

21 A. On a stand-alone pole?

22 Q.274 - Yes.

23 A. Yes.

24 Q.275 - And so in fact when it enters into a joint use
25 arrangement, it can share whatever waste remains on the

1
2 pole for the shared pole. Would that be correct? Rather than
3 bearing all of the wastage on its own?

4 A. Well when it enters the joint use arrangement it would be
5 constructing a somewhat higher pole possibly stronger
6 pole, as you indicated. So this would be a new situation
7 which may or may not have wastage on the new higher pole.

8 Q.276 - Agreed. All right. I want to move on to your
9 analysis of the proportionate use model. And I believe
10 that you indicate that you believe the proportionate use
11 model is fundamentally flawed.

12 A. For this application.

13 Q.277 - For this application. So I guess then -- have you
14 read the CARD decision that was issued by the Board in
15 this proceeding on December 21st 2005?

16 A. No.

17 Q.278 - No. But given what you have just said, I guess you
18 wouldn't be surprised that in that decision there is a
19 discussion of the allocation of certain common costs and
20 in that analysis Disco had proposed that the common costs
21 be allocated equally among three customer groups. And the
22 Board rejected Disco's proposal and held that the common
23 costs in that case should be allocated in proportion to
24 each class' share of specifically allocated costs. And I
25 take it from what you have just said that you wouldn't be

2 surprised that that occurred?

3 I do have copies of excerpts from the decision but given
4 what you just said, I didn't think I needed to circulate
5 them. But if you would like to look at it, I can
6 certainly circulate it to you and the Board.

7 A. Well, what -- the cost of what services are being
8 discussed in this decision?

9 Q.279 - They were general Holdco shared services and corporate
10 services costs. Would you prefer to see the excerpt?

11 A. Yes. Okay.

12 Q.280 - So my question was you are not surprised by that
13 decision, are you, Dr. Mitchell? Or would you be
14 surprised?

15 A. I am not surprised that different parties and the Board
16 would reach different views about how to allocate costs in
17 these categories. Mind you, I don't know what is exactly
18 in these accounts and I have not seen this decision
19 before. But general Holdco shared services and corporate
20 services are identified as -- because of their nature not
21 specifically identified as either demand energy or
22 customer related. And assuming that is a fair
23 characterization, there certainly is room for judgment as
24 to how to share those costs and this represents at least
25 two different views about that.

2 As I said yesterday, common costs, and I would
3 characterize these general Holdco shared and corporate
4 services costs as categories of common costs for a large
5 company like this, are not necessarily fixed in their
6 aggregate amount if the quantity of usage or services to
7 the different customer classes, one class or another were
8 to increase, it's conceivable to me that general costs or
9 corporate services costs would rise.

10 In that case there would be a situation in which one
11 customer class indirectly caused an increase in corporate
12 costs, for example. And that would suggest that some
13 attribution that took account of that causal relationship
14 had a basis in economic causation and one might say
15 fairness.

16 On the other hand, if it's very difficult to make that
17 relationship, then there would be possibly a case that the
18 three classes are sensible divisions of the costs and some
19 approximate sharing rule based on classes directly would
20 be appropriate.

21 So I am not surprised that the Board would arrive at a
22 different view about this than the company. And I, just
23 seeing it here today, would expect that these are the
24 kinds of common costs that are not totally fixed, but
25 would vary with the scale of operations.

1 - 3283 - Dr. Mitchell - Cross -

2 Q.281 - All right. And my understanding of common costs is we
3 have them as common costs because we can't causally
4 attribute them to specific customers or specific customer
5 groups. Do you agree with that?

6 A. We can't attribute them specifically to a single use or
7 customer group, but that does not mean that the magnitude
8 of those costs is totally fixed and unrelated in a causal
9 sense to the amount of usage.

10 Q.282 - All right. Now in your evidence you state that the
11 fundamental problem with the proportionate use model is
12 that a negligible user of dedicated space gets what you
13 call a free ride. Is that correct?

14 A. Yes.

15 Q.283 - Are you aware that the methodology that Rogers is
16 proposing in this proceeding, that in that methodology
17 each communications user is deemed to use 1/2 the
18 communications space and 1/2 the separation space. Are
19 you aware of that?

20 A. Yes.

21 Q.284 - So this negligible user scenario cannot arise under
22 the model proposed by Rogers. Would you agree with that?

23 A. With those proposed numbers, it would produce some
24 positive amount of sharing, that's correct.

25 Q.285 - All right. Now it is also my --

2 A. My example was that if that amount of space were reduced
3 to a very small amount of the pole, a corresponding amount
4 of common costs it would have shared would also be reduced
5 to potentially a negligible level.

6 Q.286 - All right. So as I understand what you are saying is,
7 you have no problem with the fact that a negligible user
8 would pay for a negligible portion of the dedicated space.
9 Is that correct?

10 A. It would be fair for him to pay in proportion to the
11 amount of dedicated space he used for dedicated space.

12 Q.287 - All right. It is only with respect to the common
13 space that you have a problem. Correct? Or you consider
14 there is a difference which results in an unfairness.

15 A. Yes. I would not consider it be a fair outcome to have a
16 user pay for very little or no common space because he
17 uses only a negligible amount of dedicated space.

18 Q.288 - Now I believe another problem that you identify with
19 the proportionate use model in this case is that it
20 violates the Littlechild Thompson rules. Is that correct?

21 A. Yes.

22 Q.289 - Now in order to apply the Littlechild Thompson rule,
23 is it not the case that you need to know the stand-alone
24 costs of each of the users of the pole so you need to know
25 the stand-alone cost of a power pole, the stand-alone cost

2 of a telco pole, and the stand-alone cost of a cable pole?

3 A. Yes, to apply it to the power pole example.

4 Q.290 - All right. Are you aware of any instance when the

5 Littlechild Thompson rule has been endorsed by a

6 regulator?

7 A. No, I can't think of regulatory endorsement of rules.

8 Q.291 - All right. Did Littlechild Thompson refer to any

9 philosophical theory or literature to support their rule?

10 A. I believe Littlechild or Littlechild and Thompson have

11 referred to principles derived by Rawls, which would be a

12 philosophical source.

13 Q.292 - But Rawls speaks to an equal sharing model, does he

14 not?

15 A. Well Rawls' analysis is directed at very basic principles

16 of equal treatment and impartiality in the application of

17 principles to real world or specific situations.

18 Q.293 - And you are proposing Littlechild Thompson as an

19 addition to equal sharing, you are superimposing that on

20 top of an equal sharing model, are you not?

21 A. I would say rather we are proposing that it be used as an

22 additional criterion to assess whether a given proposal is

23 fair.

24 Q.294 - All right. Now as I understand the rule, it says that

25

2 the percentage difference in the amount paid by the big and
3 small user when they share should be no greater than the
4 percentage difference between the stand-alone costs of the
5 big and small user. Have I got that right?

6 A. I believe that is right.

7 Q.295 - So under this rule it is okay for the cost advantage
8 of the smaller user to get smaller but it is not okay for
9 the cost disadvantage of the bigger user to get bigger.
10 Would that be correct?

11 A. I am having difficulty putting the terms cost disadvantage
12 and cost advantage to this example.

13 Q.296 - Well you agreed with me that the rule says that the
14 percentage difference in cost that they pay when they
15 share should be no greater than the percentage difference
16 they would bear if they had stand-alone facilities. I
17 think you agreed with that. Is that correct?

18 A. Yes.

19 Q.297 - So what the rule says is you can be smaller, you can
20 have a smaller difference than the difference that would
21 be in place if they had stand-alone facilities, is that
22 not correct?

23 So say for example the stand-alone cost difference is 20
24 percent, what the rule says is when you have a shared
25 facility, it would be okay if the cost difference were 10

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percent, but it wouldn't be okay if the cost difference were 30 percent. Is that correct?

A. Yes. Thank you for a numerical example. That is correct.

Q.298 - So the bigger user -- the cost discrepancy that the bigger user has to bear can never get any bigger, right? The bigger user would have paid 20 percent more if there were stand-alone facilities and the rule says that the big user can't pay 20 percent more when you share. Is that correct?

A. Yes, with that criterion, the example it couldn't pay 20 - more than 20 percent.

Q.299 - So in the stand-alone situation, the small user has a 20 percent cost advantage? Littlechild Thompson says we can go down to 10 percent and that is okay, but that 10 percent means that the smaller user's cost advantage has been squeezed. Would you agree?

A. It has -- yes. The smaller user would then have only a 10 percent lower cost than the large user and that difference could be as large as 20 percent with that criterion.

Q.300 - And in fact would you also agree that any model where in your shared world you share the costs equally, you are always going to satisfy Littlechild Thompson. Because the

2 cost difference in the shared facility will be zero so it
3 always has to be less than the cost difference for your
4 stand-alone facilities?

5 A. Yes.

6 Q.301 - Now I wonder if we could consider for a minute the
7 application of your model in the real world and I am going
8 to take the rule 1 approach.

9 So as I understand it, under that approach, the third
10 party communications tenant would pay 26.7 percent of the
11 cost of the poles. Would that be correct? We are just
12 talking about the pole costs here. And your rule 1 says
13 that the tenant should pay 26.7 percent.

14 A. Yes, using the numbers that we have been working with for
15 its segments of the pole.

16 Q.302 - Now Aliant is not going to be subject to the rental
17 rate. And in effect, what Aliant pays is 43 percent
18 because in return for owning those 43 percent of the
19 poles, it gets access to the 57 percent owned by Disco.
20 So in effect, Aliant is paying 43 percent?

21 A. Yes.

22 Q.303 - So the remaining amount would be what would be paid by
23 Disco, correct?

24 A. To --

25 Q.304 - Of the pole. So we have got 26.7 being paid by

2 Rogers. You have got 43 percent being paid by Aliant. And
3 then the remaining portion of the pole would have to be
4 covered by Disco, would it not?

5 A. Yes.

6 Q.305 - And as I calculate it, that remainder is 30.3 percent.

7 Does that sound about right to you?

8 A. Yes, subject to checking that calculation.

9 Q.306 - So power, notwithstanding that it is the biggest user
10 of space on the pole, is in fact paying less than what
11 Aliant is paying for the pole, correct?

12 A. Yes, given those percentages.

13 Q.307 - And you would consider that result to be fair?

14 A. Well, if the rule 1 sharing percentages were adopted as
15 the principle that should be applied, then it may well be
16 that the arrangement between the telecommunications
17 company and the power company would be open to
18 reconsideration.

19 And in that case I would think that that would be a
20 relevant factor for those two parties to take into account
21 that they now had an established principle and a source of
22 revenue from a third party attacher that was not there at
23 the time the agreement was negotiated.

24 So I'm not sure that the numbers -- I don't disagree with
25 your calculation. But I'm not sure the numbers

2 characterize what would be the new equilibrium, to use, you
3 know, the jargon in my profession.

4 Q.308 - Have you seen any evidence to suggest that Aliant and
5 Disco are discussing a change in their ownership positions
6 on the poles?

7 A. No.

8 Q.309 - Have there -- to your knowledge has there been any
9 renegotiation of the ownership structure in Ontario
10 following the release of the OEB decision?

11 A. A renegotiation of?

12 Q.310 - The sharing of pole ownership in Ontario between power
13 and telephone companies following the release of the OEB
14 decision in March of last year?

15 A. I'm not aware of anything.

16 Q.311 - All right. I wonder if we could move on to your
17 discussion of what some other regulators have done, and in
18 particular why certain other regulators have chosen to set
19 a pole rental rate based on the proportionate use model.
20 Now you are aware that the CRTC has used a proportionate
21 use model to establish pole rental rates, is that correct?

22 A. Yes.

23 Q.312 - And I understand that you discount the applicability
24 of the CRTC approach to these proceedings on the grounds

2 that the CRTC was motivated by rationale that do not apply at
3 this time before this Board.

4 Would that be correct?

5 A. That's my interpretation of the CRTC rules.

6 Q.313 - Were you a Commissioner on the CRTC at the time the
7 pole rental rate decisions were released?

8 A. Obviously not.

9 Q.314 - Did you participate in any of the proceedings that led
10 to pole rental rate decisions by the CRTC?

11 A. No.

12 Q.315 - Have you reviewed the CRTC's pole rental rate
13 decisions?

14 A. Very briefly.

15 Q.316 - Does the CRTC state anywhere in those decisions that
16 in adopting the proportionate use methodology it was doing
17 so in order to promote the cable industry in competition
18 in telecommunication services?

19 A. No. I don't believe the decision speaks to promoting
20 competition -- promoting the cable television industry.

21 Q.317 - So you are not aware of any references in those
22 decisions to promoting the cable television industry or
23 promoting competition in telecommunications?

24 A. I'm aware of discussions of promoting competition and
25 competitive access to network resources.

1 - 3292 - Dr. Mitchell - Cross -

2 Q.318 - Speaking --

3 A. I don't know that they come from that specific decision.

4 Q.319 - Not those specific decisions. You are not aware of
5 anything in those specific decisions. Would that be fair?

6 A. Well --

7 Q.320 - You don't --

8 A. -- I have not reviewed those decisions in great detail.

9 There may be material there. But I have seen attributed
10 to the CRTC general statements of encouragement of
11 competition.

12 Q.321 - Are you aware that the CRTC considers competitive
13 neutrality to be central to promoting competition in
14 communication services?

15 A. I have seen statements about competitive neutrality in
16 CRTC materials, yes.

17 Q.322 - Would subsidization of the cable industry be
18 consistent with that objective?

19 A. Subsidization of any telecommunications supplier would
20 probably not be consistent with that objective.

21 Q.323 - All right. Are you aware of any applications by
22 telephone companies to the CRTC since 1995 for an increase
23 in the pole rental rate?

24 A. No.

25

2 Q.324 - All right. Are you aware that in a proceeding that
3 resulted in Telecom decision 95-13 -- and that is the
4 decision that set the current 9.60 rate for Aliant poles
5 and other telephone company poles -- in that proceeding
6 Stentor argued that proportionate sharing of pole costs
7 was inequitable? Are you aware of that?

8 I do have copies of the decision if you would like me to
9 distribute them.

10 A. That would certainly refresh my memory.

11 Q.325 - To speed things up, perhaps I could refer you to page
12 17 of that decision.

13 A. Mmmm.

14 Q.326 - And the paragraph beginning at the bottom of that
15 page.

16 MS. MILTON: And excuse me, Mr. Chair. I think this
17 document will need an exhibit number. Because it is not
18 in the evidence. Unless you want to take judicial notice
19 of the CRTC decision. I'm in your hands.

20 CHAIRMAN: We will take judicial notice of it.

21 Q.327 - Sir, would you agree with me that that passage
22 suggests that Stentor argued in the proceeding that the
23 proportionate use allocation was inequitable?

24 A. I'm looking at the final paragraph of page 17 and the
25 first complete paragraph on page 18.

2 Q.328 - Yes. And I was going to go to 18.

3 A. And I don't find the Stentor proposal here.

4 Q.329 - At the bottom of page 17 I have a paragraph that

5 begins "In this proceeding" --

6 A. Yes.

7 Q.330 - -- "Stentor argued that the emergence of competition

8 between cable television undertakings and telephone

9 companies provides a reason for support structure costs to

10 be shared more equitably, so that competing companies or

11 parties are not advantaged or disadvantaged."

12 A. Yes.

13 Q.331 - All right. And if we go over to page 18 and the

14 paragraph you flagged, I believe that is the Commission's

15 determination on this issue.

16 And they said "The Commission considers competitive equity

17 a valid factor to consider in the determination of

18 appropriate rates. However, in light of the limited

19 extent of competition at this time, the Commission is of

20 the view that the sharing of support structure costs as

21 proposed by Stentor is not justified."

22 So would you agree that they indicated that there was

23 limited competition at that time between telephone

24 companies and cable companies?

25 A. I would agree they indicated there was limited

2 competition at that time.

3 \Q.332 - All right. And then they went on to say that "The
4 equal sharing is not justified, particularly given that
5 the telephone companies will have priority access to
6 support structures in order to meet current and
7 anticipated future requirements."

8 Do you see that, Dr. Mitchell?

9 A. No.

10 Q.333 - At the bottom of that paragraph?

11 A. I see it says, "The Commission is of the view that the
12 sharing of support structure costs as proposed by Stentor
13 in this proceeding --

14 Q.334 - Right.

15 A. -- is not justified".

16 Q.335 - Right. "Particularly given that the telephone
17 companies will have priority access to support structures
18 in order to meet their current and anticipated future
19 requirements."

20 Do you see that, Dr. Mitchell?

21 A. I do, Ms. Milton. But maybe I misheard you. I thought
22 you said equal sharing. Did I mishear you?

23 Q.336 - Well, what I'm saying is that they rejected the
24 Stentor proposal for a more equitable sharing of support
25 structure costs and stayed with their proportionate use

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model.

And when they did that, the justification they gave for it was that telephone companies have priority access to support structures.

Would you agree with that statement?

A. I agree that from the words here the Commission must have rejected Stentor's proposal. But I can't determine from this if that was a proposal for equal sharing of costs. And I agree that they stated that telephone companies would have priority access.

Q.337 - And they established a rate based on the proportionate use model. Would you agree with that?

A. I believe that's what they did. That's not in this part of the evidence.

Q.338 - All right. Are you aware that this priority access is reflected in Disco's proposed agreement with Rogers, that Aliant would have priority access for its current and anticipated future requirements?

A. I'm not aware of that provision.

Q.339 - Now I believe at page 29 of your report, exhibit A-64, you posit a number of factors which in your view influenced the CRTC's adoption of a proportionate use methodology in Decision 99-13.

And that was the decision that purported to set hydro

2 pole rates and ultimately was overturned by the Supreme Court
3 of Canada on jurisdictional grounds.

4 And in that part of your evidence you identify, as a
5 central objective of the CRTC, the desire to promote
6 competition in high-speed internet, local and long-
7 distance services and the fact that cable has played a
8 central role in introducing that competition.

9 Would that be a fair summary of your evidence on this
10 point?

11 A. Yes.

12 Q.340 - Are you aware that in '99 and earlier the Commission
13 forbore from regulating the internet services markets and
14 the long-distance markets on the grounds that those
15 markets were intensely competitive?

16 A. I'm aware of a general policy at that time, not the
17 specific dates or decision.

18 Q.341 - All right. Are there any references in Decision 99-13
19 to a desire to subsidize cable entry into local
20 telecommunications markets?

21 A. I don't recall references that speak of subsidies.

22 Q.342 - Are you aware of any CRTC decision where the CRTC has
23 indicated that it is going to subsidize cable entry into
24 local telephone service?

25 A. No. And I haven't characterized that rate structure

2 as one of providing a subsidy.

3 \Q.343 - No. But you indicated that central to their decision
4 was competition in three communications markets, once of
5 which was local.

6 And you have also indicated the view that the CRTC saw
7 cable as central to reaching its competitive objectives in
8 that market, correct?

9 A. Yes.

10 Q.344 - All right. Now I believe you also speculate in your
11 report that the CRTC needed to use the proportionate use
12 approach. Because if it had not it would have exposed
13 itself to complaints regarding differential treatment of
14 power and telephone companies. And this would have
15 undermined the CRTC's competitive telecom objectives.

16 I believe that starts at line 19 of this same page 29. Is
17 that a fair statement of your evidence on this point?

18 A. Yes.

19 Q.345 - Was there anything to stop the CRTC from initiating a
20 proceeding to revise telephone company pole rates had it
21 thought that it was no longer using the correct
22 methodology?

23 A. I believe it would have that authority. There may have
24 been some time limits or something that would, you know,
25 dictate when that could be done.

2 Q.346 - All right. And would you agree with me that telephone
3 company rates or the amounts that telephone companies pay
4 for the use of hydro poles are established through the
5 negotiated joint use arrangements and were unaffected by
6 any rate that might have been established by the CRTC in
7 respect of hydro poles?

8 A. Well, they could have been -- the CRTC's prior decisions
9 with regard to telephone poles could have been a factor in
10 forming the telco hydro negotiations in joint use
11 arrangements.

12 So in that sense there could be an effect potentially.

13 But I don't think there would be a regulatory effect.

14 Q.347 - No. And we haven't seen any renegotiation of the
15 ownership splits following any of these decisions on pole
16 rental rates, have we?

17 A. I'm not recalling the dates of the most recent renewal or
18 renegotiation arrangements. So it's possible there have
19 been. But I wouldn't particularly say there have been,
20 no.

21 Q.348 - All right. Now I wonder if we could go to page 28 of
22 your evidence and the quote that you have near the top of
23 the page from Telecom Decision 99-13? And would you agree
24 with me that in that passage that you quote from the CRTC
25 decision the CRTC that has emphasized that in determining

2 an appropriate weight for pole rental, it's important to
3 consider that a tenant like cable does not have rights of
4 ownership in the pole?

5 A. Yes. The first sentence says that's part of their
6 decision.

7 Q.349 - So that was a factor that was specifically identified
8 by the Commission in that decision?

9 A. Yes.

10 Q.350 - All right. Now I wonder if we could go to the
11 decision of the Nova Scotia Utilities Board with respect
12 to pole rental rate. And that is at tab D of RCC-1. Page
13 3 of that decision and the last paragraph on the page.
14 Yes. Page 3, the bottom paragraph.

15 A. I am not sure if I have the right binder. I have the
16 binder, the first page is stamped RCC-1, September 2, 2005
17 letter from Leslie Milton, but is it --

18 Q.351 - I believe that -- that sounds like the correct one.

19 And Tab D, do you have a tab D?

20 A. D?

21 Q.352 - D?

22 A. As in David?

23 Q.353 - Yes.

24 A. I have tabs 1 and 2.

25 Q.354 - Oh, you must --

2 MS. MILTON: We can break for lunch if you like?

3 CHAIRMAN: We will break for lunch. And also we will come
4 back at -- we will come back at 1:30 so that some folks
5 can have an opportunity to check out of the hotel over
6 lunch.

7 (Recess - 12:00 p.m. to 1:30 p.m.)

8 CHAIRMAN: Good afternoon, ladies and gentlemen. Any
9 preliminary matters? Then go ahead, Ms. Milton.

10 MS. MILTON: Thank you, Mr. Chairman.

11 Q.355 - I believe where we were, Dr. Mitchell, we were looking
12 at the Nova Scotia Board decision in respect of pole
13 rental rates for Nova Scotia Power.

14 And we were in Appendix D to RCC-1 at page 3 and the last
15 paragraph on that page.

16 A. I'm in Appendix D at page 3.

17 Q.356 - At page 3. And the paragraph at the bottom of the
18 page, the first sentence of that paragraph is the one that
19 you quote in your report.

20 And it says "The Board does not consider that the relative
21 merits of costing pole attachment service on the basis of
22 incremental costs versus fully allocated costs were
23 examined in sufficient depth at the hearing for it to make
24 a definitive pronouncement on the matter at this time."

2 And in the remainder of the paragraph, which you have not
3 quoted, it states "The Board observes however that it was
4 impressed with the common sense underlying Mr. Ford's
5 submission that pole attachment service can hardly be
6 characterized as a basic or a core service provided by
7 NSPI and that an approach based on incremental cost plus a
8 contribution to common cost is preferable where the
9 customers receiving the service do not enjoy the
10 advantages that an ownership interest in the poles would
11 convey." Do you see that, Dr. Mitchell?

12 A. Yes. I see the whole paragraph.

13 Q.357 - Would you agree that based on the evidence before it
14 the Nova Scotia Board felt that Mr. Ford's proportionate
15 use approach was appropriate because third party tenants
16 do not enjoy the advantages of ownership?

17 A. That was certainly a factor in the decision they reached.

18 I think the whole paragraph indicates that they did not
19 examine the more basic question of, as they say,
20 incremental costs versus fully allocated costs in a
21 sufficient basis to make a pronouncement.

22 Q.358 - All right. I think we discussed though that both
23 approaches are fully allocated costs, didn't we?

24 A. We did discuss that.

25 Q.359 - All right. Now would you agree with me that the FCC

2 approach to setting pole rental rates results in a
3 substantially lower contribution by the tenant to pole
4 costs than the proportionate use approach that has been
5 used by the CRTC and is proposed by Dr. Ware?

6 A. Yes. I believe that's right.

7 Q.360 - Thank you. I want to turn very briefly to the issue
8 of competitive neutrality. I believe you raise that in
9 your report, do you, Dr. Mitchell?

10 A. Yes.

11 Q.361 - Does Rogers compete with Disco?

12 A. Not to my knowledge.

13 Q.362 - So the rate established by this Board will have no
14 impact on competition between Rogers and Disco, is that
15 correct?

16 A. Correct.

17 Q.363 - And are you aware that the rate established by this
18 Board in this proceeding will not apply to Aliant?

19 A. Yes.

20 MS. MILTON: All right. Thank you. Thank you, Dr.
21 Mitchell. Mr. Chairman, those are all my questions.

22 CHAIRMAN: Thank you. I just wonder about the last answer
23 of the witness. I think it is in the Board's discretion
24 as to whether or not we do, as I understand the other
25 regulators have done, which is to exempt those involved in

2 the joint pole agreements from the tariff item. So we do
3 retain that jurisdiction. However, those are all your
4 questions?

5 MS. MILTON: Yes.

6 WITNESS: Mr. Chairman and Ms. Milton, I have considered two
7 questions that were asked me previously over the break and
8 have information that I didn't have in memory at least,
9 and wondered if you would like to have me augment the
10 record on those?

11 CHAIRMAN: We certainly want to get the best evidence we can
12 in front of us, so go ahead, sir.

13 WITNESS: Yesterday we had a discussion about whether there
14 were any duplicate poles, I believe that was the term we
15 used, in New Brunswick. And I believe that my response
16 was I wasn't aware of any.

17 I was informed by Mr. O'Hara that there are two areas of
18 the province in which there are still poles on both sides
19 of the street, joint use poles. And I believe pre-Aliant
20 or Telecom poles and cables running on both those streets.

21

22 Q.364 - And how much of the province would that be?

23 A. I don't know what the numbers are. It may not be a
24 significant number. But I was totally unaware that there
25 were any.

2 Q.365 - All right.

3 A. If there are some. The other matter was I was at a loss
4 to recall any documents describing the CRTC's policy
5 toward encouraging competition in telecommunications.
6 And I understand from the CRTC's -- let's see, 2002
7 December Report to the Governor-in-Council, Status of
8 Competition in Canadian Telecommunications Markets
9 Deployment, Accessibility of Advanced Telecommunications
10 Infrastructure and Services, that it describes a number of
11 rulings that it had recently taken, quote, "That further
12 support the development of competition in the Canadian
13 telecommunications industry".
14 It then summarizes a number of rulings. And one of those
15 items listed is the CRTC determined the terms and
16 conditions for access by cable companies to the support
17 structures of certain utility companies. The matter is
18 currently before the Supreme Court of Canada.

19 Q.366 - Would you agree with me that the statement there
20 refers to the fact that it had taken jurisdiction over
21 hydro poles to establish a rate for access to essential
22 facilities?

23 A. I don't know the details of what the reference was there,
24 whether it was hydro or just telephone or both and whether
25 it was an assertion of jurisdiction issue. But

2 the terms and conditions for access to support structures of
3 certain utility companies. And my point was only that as
4 telecommunications policy the regulator was attempting to
5 encourage competition.

6 Q.367 - There is no question about that, sir. The issue is
7 whether or not their methodology for establishing a pole
8 rate was intended somehow to subsidize cable entry into
9 local competition. Does the point you just raised address
10 that issue?

11 A. Well, my memory of the history of this is that the CRTC
12 did assert that it had jurisdiction over power as well as
13 telephone poles and that it was setting a rate that would
14 encourage apparently in its interpretation competition. I
15 would not have characterized that as a subsidy. But it
16 was a rate that was low, a favorable rate as indicated in
17 our paper.

18 Q.368 - But you don't know whether the statement you just
19 quoted relates to the fact that it took jurisdiction and
20 established a rate for an essential facility as opposed to
21 anything to do with the methodology for establishing the
22 rate?

23 A. No. I don't know whether the statement refers to
24 jurisdiction or methodology on that point.

25 MS. MILTON: All right. Thank you, Dr. Mitchell.

2 CHAIRMAN: Mr. Gorman, any questions of the witness?

3 MR. GORMAN: No questions, Mr. Chairman.

4 CHAIRMAN: Mr. MacNutt?

5 MR. MACNUTT: Board Staff have no questions, Mr. Chairman.

6 CHAIRMAN: Okay. I presume the Public Intervenor does not
7 have any questions?

8 MS. YOUNG: Yes. That would be correct. Thank you.

9 CHAIRMAN: Any redirect?

10 MR. RUBY: No, Mr. Chairman.

11 CHAIRMAN: Thank you. Commissioner Sollows has pointed out
12 to me, properly so, that you will have an opportunity
13 after the panel asks any questions, that they do if
14 necessary.

15 BY THE BOARD:

16 MR. TINGLEY: Dr. Mitchell, Ms. Milton asked you a question
17 and the question was does Disco could build poles solely
18 to its own requirements? What does that mean, that they
19 can build poles just for electricity ignoring any
20 communication?

21 A. I believe I took the question to mean that, that it could
22 build a power only -- a stand-alone pole just for the use
23 of the power company.

24 MR. TINGLEY: Because I was under the impression that -- I
25 thought I read in the evidence somewhere where it said

2 that a power company had to build poles with -- keeping in
3 mind that there would be communication on it? Can anybody
4 clarify that point for me?

5 MS. MILTON: I don't believe there is any obligation to do
6 so. The fact that they do that is a result of their joint
7 use agreement with Aliant.

8 MR. TINGLEY: So there has to be -- so if NB Power needed
9 power somewhere, they wouldn't necessarily have to build
10 the pole, they wouldn't necessarily have to build a 40
11 foot pole if --

12 MS. MILTON: If it weren't a joint use pole they could build
13 --

14 MR. TINGLEY: Whatever they wanted?

15 MS. MILTON: Whatever they want, yes.

16 MR. TINGLEY: Thank you.

17 MR. SOLLOWS: Thank you, Mr. Chairman. Dr. Mitchell,
18 further to some of the issues that I think Ms. Milton has
19 raised, I just want to make sure that it's clear in my
20 mind, if I refer you to page 4 of your slide presentation
21 and you describe rule number 1.

22 I understand this to mean that you believe it's fair that
23 the common costs be attributed or shared equally between
24 users. Is that a reasonable way to characterize what you
25 have there?

2 A. As regards to the common costs, yes. I would endorse
3 this rule as one fair way to share the common costs. But,
4 of course, the other portion of the rule is that the costs
5 of dedicated space would be borne entirely by the user
6 responsible for that part of the space.

7 MR. SOLLOWS: Thank you. Now as to what a common cost is, I
8 understand it to be a cost that cannot reasonably be
9 attributed to any single user of a pole, is that right?

10 A. I think that's a good working principle. You know, if we
11 were to go and do calculations with stand-alone poles and
12 with joint use poles and look at the incremental costs of
13 adding the user or subtracting the user and took out all
14 of those incremental costs, what we would be left with is
15 a residual cost. And it's that residual that cannot be
16 attributed and is common to all of the participants.

17 MR. SOLLOWS: Thank you. I want to move next to page 5
18 where you gave your pipeline example. And when you
19 described the example, you indicated that towns A and B
20 had the same population. I took that to mean that they
21 had the same rate of water consumption. Is that what you
22 meant to imply?

23 A. Certainly to keep the example as straightforward as
24 possible, yes, I imagine that their -- whatever use or
25 requirements they placed on the pipes were equivalent in

2 terms of flow of water or pumping requirements with just the
3 distance factor that was distinguishing them.

4 MR. SOLLOWS: So if the rate of water use in the two towns
5 were significantly different from one another, would you
6 still advise that they should share the costs of the
7 common pipeline equally?

8 A. Assuming that that different use, as I think your question
9 implies, resulted in different requirements for the shared
10 portion, no, I would not recommend equal. If it did not
11 change the common cost -- where the common cost was the
12 same irrespective of the amount of use, then rule 1, 2 or
13 3 would continue to be appropriate.

14 MR. SOLLOWS: Thank you. Next I want to go to page 10 of
15 your presentation, which is the airport runway example.
16 And it deals with small, medium and large aircraft. When
17 I took my calculator out and did the sums, it seems to
18 imply that the small aircraft pays 23 percent of the
19 runway costs, the medium aircraft pays 34 percent and the
20 large aircraft pays the remaining 43 percent or so.
21 And it's all premised on the notion that all the aircraft
22 use about 68 percent of the runway, the medium aircraft
23 uses 91 percent of it and the large ones use all of it.
24 Is that sort of a fair summary?

25 A. I haven't actually done the sums. I chose these

2 numbers basically so that the divisions would be round
3 numbers.

4 MR. SOLLOWS: Oh, okay.

5 A. Uniform numbers. But not that they are at all suggestive
6 of the actual requirements of aircraft. But only to
7 illustrate the idea.

8 But again the thrust of your question is correct. That
9 the sharing percentages that result here are -- do not
10 match up with shared space on percentage usage.

11 MR. SOLLOWS: So based on sort of my understanding, I want
12 to go a little further in this, of both civil aviation and
13 engineering, I would imagine that the costs of building a
14 runway for a medium-size aircraft would be three or four
15 times larger -- or the size of the runway would be three
16 or four times larger than that for a light aircraft and
17 the cost might be 10 times higher.

18 And similarly building a runway for a heavy or a large
19 aircraft would be -- you would need three or four times
20 the area and again 10 times larger than that for the
21 medium.

22 So I want to know how you propose to allocate the capital
23 costs or how this process would apply when you had this
24 order of magnitude difference between the incremental
25 costs of satisfying the demand? On the assumption that

2 there is only one site and only one runway be built and there
3 are no other incremental benefits or detriments to any
4 user?

5 A. Right. I think that's exactly in the spirit of the
6 example. And certainly the engineering considerations you
7 suggest are far closer to reality than my worked out
8 example here. So we probably should sort of reverse this
9 and have C be the small aircraft and B be the medium and A
10 be the large one in terms of the relative magnitudes.

11 And, of course, that would change the -- have to take-off
12 from the right to the left to start with as it were. Yes.

13 And the lion's share -- the 747 share of the runway would
14 definitely be a very high percentage. But the principle
15 would be the same that all the aircraft would share the
16 smallest segment, the lowest cost segment.

17 MR. SOLLOWS: Right.

18 A. And then only those aircraft use the next larger segment
19 would share in that proportion equally and so forth.

20 MR. SOLLOWS: I understand that. Thank you. So I think
21 finally I just want to come back to common costs and poles
22 and wires and ask you to consider again my understanding
23 from an engineering/physics perspective.

24 I am quite comfortable with the notion that the forces

2 imposed on the pole by tension in the wires or by the weight
3 of the wires, wind and ice loads, they depend upon the
4 weight of the wire, the diameter, the span, the sag
5 between poles, the diameter of the wire in the case of
6 wind loads.

7 I also understand that these forces along with those from
8 the other things like transformers and lights and signal
9 amplifiers and those sorts of things would influence the
10 selection of the pole in respect of its strength and the
11 number and the size of guy wires that they might use and
12 the bracing it requires and how deep it's going to be buried
13 from purely engineering considerations.

14 On that basis I would expect to find the costs related to
15 those force loads allocated in proportion to the load
16 imposed by each user and not shared equally as common
17 costs.

18 So can you tell me in your view that if I can find some
19 reasonable allocation like this or some other way for
20 these kind of costs, should I still find them in the
21 common costs or should they be allocated out and just the
22 residue left as common costs?

23 A. Well, I am sure again your characterization of the
24 important factors that load a pole and determine its

2 anchoring and so on correspond much better than my extremely
3 simplified examples.

4 The purpose of trying to stay very simple is to bring into
5 sharp relief exactly what principles we are talking about.

6 So I would say that the principles still apply, but we
7 have to measure them carefully against the actual factors.
8 Now if it's the case that a telephone only pole and a
9 power only pole would be built to the same physical
10 standards in terms of the amount of guying that is
11 required, the strength of the pole itself, the depth it
12 has to be buried, so that the first what 6 -- 25 feet of
13 pole would cost the same whether it's a telephone only
14 pole or a power only pole, even though the loads put on
15 those two poles would be different.

16 Then I think one could conclude that that common cost is
17 the same for the two types of poles, even though the
18 actual loads imposed differ by usage, those differences in
19 loads don't create a difference in cost.

20 MR. SOLLWS: Got you.

21 A. On the other hand, if your example goes to the point where
22 there is enough additional load from one of those parties
23 that it requires a stronger pole or a deeper burial or
24 more guying or something that increases the

1 - 3315 - Dr. Mitchell by the Board -

2 cost, then that difference in cost is attributable to that
3 additional user, that additional load.

4 So there could be a situation here where some costs that
5 we might think of as associated with the first 25 feet of
6 the pole increase because of one user and that increase is
7 appropriately attributable -- causally attributable to
8 that use alone.

9 MR. SOLLOWS: Thank you. That's what I wanted to clear up.

10 Thanks very much. That's all.

11 CHAIRMAN: Mr. Ruby, anything arising from that?

12 MR. RUBY: I do have one question, Mr. Chairman.

13 REDIRECT EXAMINATION BY MR. RUBY:

14 Q.369 - Dr. Mitchell, just following up on that last question,
15 in this hearing and in all the evidence that you have seen
16 whether from Disco or from Rogers, what is the unit of
17 measure everybody is using to allocate costs of these
18 poles?

19 A. Oh, I think all the parties that I am aware of have agreed
20 to or have decided that a 40 foot pole is the standard and
21 assuming a uniform cost per foot of pole is appropriate.
22 And one can dig into the particulars of the engineering,
23 the distribution of poles, the cost of different types of
24 poles and justifiably inquire is that a sufficiently
25 reasonable approximation to the complex

2 reality of the company that it's adequate to proceed on that
3 basis. But I think all the discussion we have had is
4 based on that -- that 40 foot standard as a discussion
5 vehicle.

6 MR. RUBY: Thank you, Dr. Mitchell. Mr. Chairman, those are
7 my questions.

8 CHAIRMAN: Thank you, Mr. Ruby. I know this is unusual, but
9 any problem with the last response?

10 MS. MILTON: No, Mr. Chairman.

11 CHAIRMAN: Great. And that is that. All right. Thank you,
12 Dr. Mitchell. You are excused.

13 WITNESS: Thank you.

14 CHAIRMAN: And I presume that those are all the questions
15 from counsel today? Okay. So we get back to when the
16 pole attachment matter will be considered again. Mr.
17 Hashey?

18 MR. HASHEY: Mr. Chairman, we are quite confident that there
19 will be space available in Saint John on the 28th. Ms.
20 Gilbert is just trying to confirm that. And we have asked
21 the hotel here to open up space for us. Apparently one of
22 their gatherings may not require the whole area. And this
23 is just on the edge of confirmation. But I would like to
24 ask that we probably reschedule this part to start on the
25 28th or alternatively the 31st of March, whichever.

2 CHAIRMAN: The 31st of March?

3 MR. HASHEY: I am sorry. On the 1st of March, whichever --
4 apparently we have got the -- you know, you have -- and if
5 we have the 28th, we will have four days in that week.

6 CHAIRMAN: Yes.

7 MR. HASHEY: 28th. And then 1, 2 3, March.

8 CHAIRMAN: Right.

9 MR. HASHEY: You know, maybe even 2, 3, March, if that makes
10 it convenient for people to conclude this one. And keep
11 the other Revenue part going into the 28th, 29th -- or
12 sorry, 28th and 1st.

13 CHAIRMAN: Mr. Hashey, we will come together again before we
14 arrive at those dates. So shall we just leave it at that
15 we will reconvene on the 1st of March -- or sorry, that
16 this evidence will be heard on the 1st of March. However,
17 if Ms. Gilbert is successful in us getting space either in
18 this hotel or some other Saint John hotel on the last day
19 of February, why that evidence will start to be heard
20 again at that time and at 9:15 in both cases. How is
21 that?

22 MR. HASHEY: That's fine, Mr. Chairman. We will let the
23 parties know, you know, within the next 24, 48 hours, the
24 latest.

25 CHAIRMAN: And we reconvene again on the --

2 MR. HASHEY: 6th of February.

3 CHAIRMAN: 6th. Good. All right. And again at 9:15. And

4 Dr. Mitchell, thank you for your testimony in front of the
5 Board.

6 And I want to thank again Board staff and shorthand
7 reporter, and as well, those ladies in the back booth that
8 have been slaving away for three days without too many
9 people listening in. Thank you all very much.

10 (Adjourned)

11 Certified to be a true transcript
12 of the hearing, as recorded by me
13 to the best of my ability.

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15 Reporter
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