

1 (9:30 a.m.)

2 MR. NOSEWORTHY, CHAIRMAN: Good morning. Before  
3 we get started, Mr. Kennedy, are there any preliminary  
4 matters?

5 MR. KENNEDY: No, not this morning, Chair, as far as I'm  
6 aware.

7 MR. NOSEWORTHY, CHAIRMAN: Thank you. Good  
8 morning, Mr. Brickhill.

9 MR. BRICKHILL: Good morning.

10 MR. NOSEWORTHY, CHAIRMAN: Ms. Butler, are you  
11 concluded with your cross-examination?

12 MS. BUTLER, Q.C.: I am concluded with my cross-  
13 examination. Thank you, Mr. Brickhill.

14 MR. BRICKHILL: Thank you.

15 MR. NOSEWORTHY, CHAIRMAN: Thank you very much.  
16 Ms. Henley Andrews, good morning.

17 MS. HENLEY ANDREWS, Q.C.: Good morning, Mr.  
18 Chairman.

19 MR. NOSEWORTHY, CHAIRMAN: I'd ask you if you  
20 could begin yours, please, your cross-examination.

21 MS. HENLEY ANDREWS, Q.C.: Thank you. Mr. Brickhill,  
22 when I look at your evidence, the first question that I have  
23 is to try and find out from you precisely what parts of the  
24 cost of service study or what inputs into the cost of service  
25 study were prepared by you and what was provided by  
26 Hydro.

27 MR. BRICKHILL: Hydro essentially performed the  
28 systemization and the functionalization. Our primary focus  
29 was allocation.

30 MS. HENLEY ANDREWS, Q.C.: Could you explain what  
31 you mean by systemization?

32 MR. BRICKHILL: I'm grouping the costs for the five  
33 separate systems, island isolated ...

34 MS. HENLEY ANDREWS, Q.C.: Okay, different  
35 geographic regions, you mean.

36 MR. BRICKHILL: That's correct.

37 MS. HENLEY ANDREWS, Q.C.: And what ... when you  
38 say functionalization, what do you mean that Hydro did?

39 MR. BRICKHILL: Grouping the costs into transmission,  
40 generation and distribution.

41 MS. HENLEY ANDREWS, Q.C.: You indicated in your  
42 testimony and also yesterday on some questions asked by  
43 Ms. Butler that the firm rates that are proposed by,  
44 proposed for Hydro's customers are based on an embedded  
45 cost of service. Could you explain what that means in  
46 practical terms?

47 MR. BRICKHILL: What that means in practical terms is the  
48 calculation of the rates is based upon historic costs,  
49 accounting costs as reflected on the books of the  
50 company.

51 MS. HENLEY ANDREWS, Q.C.: Okay. Is this your first  
52 time testifying before this Board, is that correct?

53 MR. BRICKHILL: That's correct.

54 MS. HENLEY ANDREWS, Q.C.: But it's my understanding  
55 that one of your colleagues, Dr. Robert Surekais (phonetic),  
56 has previously testified from Foster and Associates.

57 MR. BRICKHILL: That's correct.

58 MS. HENLEY ANDREWS, Q.C.: Prior to coming here to  
59 testify have you reviewed his testimony at previous  
60 hearings?

61 MR. BRICKHILL: I did probably over a year ago but not  
62 recently.

63 MS. HENLEY ANDREWS, Q.C.: One of the ... because of  
64 the discussion that you had yesterday with Ms. Butler with  
65 respect to, sometimes it was embedded cost and sometimes  
66 it was marginal costs, I just want to take a little bit of time  
67 and be sure that I understand the principles that are being  
68 applied in your cost of service, and I was, there was an  
69 explanation of allocated costs of service in Dr. Surekais'  
70 testimony from the 1992 rate hearing that I was going to ask  
71 you to comment on, if it could be, copy could be given.

72 MR. KENNEDY: This is **IC-1**, Chair.

73 MR. NOSEWORTHY, CHAIRMAN: Thank you.

74 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, if you look  
75 at line 23 at the bottom of page four of Dr. Surekais'  
76 testimony from 1992, and he indicates that the two types of  
77 cost ... I'm sorry, I'll wait till everybody has that. He  
78 indicates that the two principal types of cost analysis are  
79 fully distributed or allocated cost of service and long-run  
80 incremental cost analysis. Am I correct that a fully-  
81 distributed or allocated cost of service is basically the same  
82 thing as an embedded cost of service?

83 MR. BRICKHILL: That's correct. We mean the same thing.

84 MS. HENLEY ANDREWS, Q.C.: And long-run incremental  
85 cost analysis is effectively a marginal cost analysis?

86 MR. BRICKHILL: So as to clear up any misunderstanding,  
87 yesterday when I was speaking of marginal cost I was  
88 speaking of short-run marginal costs which would be  
89 different than long-run incremental costs.

90 MS. HENLEY ANDREWS, Q.C.: And that was basically my

1 next question, which is that when you look at marginal  
2 costs there are two types of marginal costs, which is short-  
3 run and long-run.

4 MR. BRICKHILL: That's correct.

5 MS. HENLEY ANDREWS, Q.C.: And am I correct that  
6 when you're looking at an allocated cost of service or an  
7 embedded cost of service, you're basically taking the assets  
8 as they exist today and distributing both their capital costs  
9 as well as their operating costs to the customers based on  
10 amounts that have been actually incurred or will be  
11 incurred?

12 MR. BRICKHILL: That's correct.

13 MS. HENLEY ANDREWS, Q.C.: And while I recognize that  
14 this is somewhat simplistic, that when you're looking at a  
15 long-run marginal cost type of study, you are looking at  
16 what the cost of your next generation and your next assets  
17 is likely to be.

18 MR. BRICKHILL: There's some variation in that.  
19 Sometimes people will look over a very long-term cycle, 20  
20 or 30 years. They have more than the next ... other analysts  
21 simply look at the next edition of capacity. I think the latter  
22 is probably more common than former.

23 MS. HENLEY ANDREWS, Q.C.: And the 1993 cost of  
24 service methodology that was adopted by the Board is an  
25 embedded cost of service methodology, you would agree?

26 MR. BRICKHILL: That's correct.

27 MS. HENLEY ANDREWS, Q.C.: So it has nothing to do  
28 with long-run marginal cost.

29 MR. BRICKHILL: That's correct.

30 MS. HENLEY ANDREWS, Q.C.: If you look at **page five of**  
31 **Dr. Surekais' 1992** testimony, he's asked, "What is the  
32 usefulness of an allocated or an embedded cost of service  
33 study?" And we've discussed effectively the first  
34 sentence, but there is, the second one says, "Since there is  
35 no single correct manner of making such an allocation, the  
36 result will reflect a number of judgements." And when you  
37 were asked some questions yesterday by Newfoundland  
38 Power, you did indicate that judgement is an issue with  
39 respect to a cost of service study, is that correct?

40 MR. BRICKHILL: That's correct.

41 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
42 when it comes to assignment of assets between common  
43 and specifically assigned, for example, that there would be  
44 a certain amount of judgement required?

45 MR. BRICKHILL: That's correct.

46 MS. HENLEY ANDREWS, Q.C.: If you look at lines 11 to  
47 14, Dr. Surekais had said that, "The translation of cost to

48 pricing requires a knowledge of and a use of other factors,  
49 including an appreciation of the relationship between  
50 supply and demand, relative growth of consumption and  
51 the elements which determine demand such as the  
52 availability and the price of alternatives." Would you agree  
53 that that is also true with respect to an embedded cost of  
54 service study as well as with a long-run marginal cost of  
55 service study?

56 MR. BRICKHILL: Yes, that's correct.

57 MS. HENLEY ANDREWS, Q.C.: When you say that the  
58 factors include an appreciation of the relationship between  
59 supply and demand, what do you mean?

60 MR. BRICKHILL: If I had written this sentence, I probably  
61 would have left out supply and demand.

62 MS. HENLEY ANDREWS, Q.C.: Okay.

63 MR. BRICKHILL: But I believe what he's speaking to is the  
64 relative amount of generation capability versus the outlook  
65 for load growth.

66 MS. HENLEY ANDREWS, Q.C.: And when there's a  
67 reference to a factor being the relative growth of  
68 consumption, what does that relate to?

69 MR. BRICKHILL: That relates to the load growth for the  
70 different classes of customers.

71 MS. HENLEY ANDREWS, Q.C.: So that would include  
72 having to take into account whether the load growth for  
73 one customer was greater or lesser or significantly different  
74 from that for other customers?

75 MR. BRICKHILL: That's correct.

76 MS. HENLEY ANDREWS, Q.C.: If you turn to page six of  
77 this extract, I understood from your testimony yesterday  
78 that you agreed that the allocation methodology used in an  
79 embedded cost of service study can be used to further the  
80 goal of fairness, correct?

81 MR. BRICKHILL: That's correct.

82 MS. HENLEY ANDREWS, Q.C.: And do you also agree  
83 that such an allocation method can be used to further the  
84 goal of economic efficiency?

85 MR. BRICKHILL: That's correct.

86 MS. HENLEY ANDREWS, Q.C.: And what do you mean  
87 by economic efficiency?

88 MR. BRICKHILL: Generally transmitting proper price  
89 signals so as to minimize aberrant or economically  
90 inefficient reactions to the rates.

91 MS. HENLEY ANDREWS, Q.C.: Would that also include  
92 the efficient use of the resources that are part of the  
93 system?

- 1 MR. BRICKHILL: Yes, it would.
- 2 MS. HENLEY ANDREWS, Q.C.: So, for example,  
3 maximizing to the extent possible the generation assets that  
4 the utility has?
- 5 MR. BRICKHILL: That's correct.
- 6 MS. HENLEY ANDREWS, Q.C.: And encouraging  
7 customers to manage their demand?
- 8 MR. BRICKHILL: That's correct.
- 9 MS. HENLEY ANDREWS, Q.C.: The answer given by Dr.  
10 Surekais to the question to explain further what he meant in  
11 1992 says that, "The allocation of costs, particularly  
12 capacity-related cost, using methods that track cost  
13 behaviour can be regarded as supportive of the goal of  
14 economic efficiency," and then goes on to say that, "The  
15 use of methods that track use of the facilities are generally  
16 more supportive of the goal of fairness." Do you agree  
17 with that?
- 18 MR. BRICKHILL: Yes, I do.
- 19 MS. HENLEY ANDREWS, Q.C.: With both statements?
- 20 MR. BRICKHILL: Yes.
- 21 MS. HENLEY ANDREWS, Q.C.: Do you agree that from a  
22 customer perspective the issue of fairness is very important  
23 to the customer's view of the regulated process?
- 24 MR. BRICKHILL: Yes.
- 25 MS. HENLEY ANDREWS, Q.C.: And do you agree that  
26 when we talk about an embedded cost of service study that  
27 one of the things that you are trying to accomplish in the  
28 functionalization and the allocation is to fairly assign costs  
29 to the different rate classes based upon the costs which  
30 they cause?
- 31 MR. BRICKHILL: That's correct.
- 32 MS. HENLEY ANDREWS, Q.C.: So cost causation, as it is  
33 referred to in your testimony, is a very large part of the  
34 analysis required in completing a cost of service study?
- 35 MR. BRICKHILL: That's correct.
- 36 MS. HENLEY ANDREWS, Q.C.: And I presume you would  
37 also agree that a certain amount of the decision-making that  
38 would be involved in that process would be, would require  
39 judgement.
- 40 MR. BRICKHILL: That's correct.
- 41 MS. HENLEY ANDREWS, Q.C.: However, would you  
42 agree that if you looked at a particular set of costs and how  
43 they had been divided between classes of customers, that  
44 you would expect that the benefit that any particular  
45 customer is receiving should be roughly equivalent to the  
46 cost that it is paying for that asset?
- 47 MR. BRICKHILL: No, I don't think that's necessarily the  
48 case.
- 49 MS. HENLEY ANDREWS, Q.C.: And why not?
- 50 MR. BRICKHILL: If I understood your statement, you were  
51 saying that a customer should be willing to pay up to its  
52 value of service or should be happy paying value of  
53 service, I think customers would rather pay their cost of  
54 service than the value of service which is normally higher  
55 than the cost of service.
- 56 (9:45 a.m.)
- 57 MS. HENLEY ANDREWS, Q.C.: So the value of the service  
58 would normally be higher than the cost of the service?
- 59 MR. BRICKHILL: Yes.
- 60 MS. HENLEY ANDREWS, Q.C.: Later in the paragraph on  
61 page six, starting at line 14, there is a discussion, well  
62 actually it starts I think around line 12, there's a discussion  
63 of the different methods for assigning costs to rate classes,  
64 and starting at line 14 there's a discussion of fairness where  
65 Dr. Surekais said, "If a particular customer class makes  
66 substantial use of the system at other times," and this is  
67 when you're using a peak responsibility method, "but is  
68 almost non-existent on the peak day, it gets allocated  
69 virtually no cost in that method, and that's frequently  
70 regarded as unfair, and that an allocation methodology that  
71 gives predominant weight to use, such as the average  
72 demand method, may give too much weight to off-peak  
73 loads and that the use of an allocation methodology that  
74 gives predominant weight to peak periods but which also  
75 recognizes the impact of loads on the peak hour of the year  
76 may be interpreted as giving balanced weight to the  
77 objectives of economic efficiency and fairness." The third  
78 methodology, allocation methodology that's mentioned,  
79 which is one that gives predominant weight to peak periods  
80 but also recognizes the impact of loads, is that the type of  
81 allocation methodology that you have utilized in this cost  
82 of service?
- 83 MR. BRICKHILL: Very broadly speaking, yes, but I think  
84 we probably gave more weight to peak loads for the firm  
85 customers. We gave no weight to peak loads for  
86 interruptible customers but we credited a very substantial  
87 amount of money to the cost of service as a result of the  
88 interruptible rates, so while I think our approach was  
89 balanced, in total it wasn't necessarily balanced in the cost  
90 of service per se.
- 91 MS. HENLEY ANDREWS, Q.C.: When you talk about  
92 balance, what would you consider to be the most important  
93 elements to balance in making judgements on allocation?
- 94 MR. BRICKHILL: I would regard rationality as the most

1 important factor.

2 MS. HENLEY ANDREWS, Q.C.: And what do you mean  
3 by rationality?

4 MR. BRICKHILL: That the classification or allocation  
5 method be soundly based in theory and application.

6 MS. HENLEY ANDREWS, Q.C.: Do you agree that in  
7 looking at allocation factors and allocation judgement that  
8 it, that consistency would be an important element to look  
9 at?

10 MR. BRICKHILL: Yes.

11 MS. HENLEY ANDREWS, Q.C.: Consistency as between  
12 various assets at the current time, consistency in treatment  
13 of those assets?

14 MR. BRICKHILL: I would say consistent treatment is very  
15 important but not necessarily focused merely on an asset  
16 or assets. Assets might in some circumstances be treated  
17 differently for the purpose of consistency, and while that  
18 sounds inconsistent, I would say the case of specific  
19 assignment of facilities, which Hydro performed, was  
20 performed to provide for greater consistency but what the  
21 result is, there are some transformers treated as common  
22 and some as specific. However, their goal, since in the past  
23 certain assets were directly assigned to Newfoundland  
24 Power, Hydro wished to be consistent in treating the  
25 industrials the same way.

26 MS. HENLEY ANDREWS, Q.C.: I'll get to those specific  
27 issues, but in general terms, without getting into the  
28 specifics, if you look at an embedded cost of service  
29 allocation from a historical perspective, one rate hearing  
30 over another, would you agree that you would not expect  
31 to see significant shifts in the judgement that is applied?  
32 In other words, the rules shouldn't change.

33 MR. BRICKHILL: I would say no, and let me explain. First  
34 of all, commissions change their minds sometimes over  
35 time. What was deemed just and reasonable years ago  
36 might not be deemed just and reasonable today. We have  
37 seen changes in cost allocation and rate design over the  
38 past 30 years, I wouldn't be surprised to see changes again,  
39 but there can be more than one just and reasonable  
40 outcome, and particularly when you reassess this sort of  
41 thing over time.

42 MS. HENLEY ANDREWS, Q.C.: I don't disagree with that  
43 vis-a-vis the Board, but would you agree that if a utility,  
44 and I'm not specifically referencing Hydro although we  
45 know that that's the context of the hearing, but that if a  
46 utility wishes to change the rules or change the way it  
47 makes its judgements, then that is something which a  
48 regulator would need to be made aware of and to determine  
49 whether it is regarded just and reasonable?

50 MR. BRICKHILL: That's correct.

51 MS. HENLEY ANDREWS, Q.C.: Do you agree that the use  
52 of an embedded cost of service study is pretty consistent  
53 with most other Canadian jurisdictions?

54 MR. BRICKHILL: That's correct.

55 MS. HENLEY ANDREWS, Q.C.: When we talk about firm  
56 and non-firm demand, what do you mean by a firm  
57 customer or a firm demand?

58 MR. BRICKHILL: I mean a customer not ordinarily subject  
59 to interruption.

60 MS. HENLEY ANDREWS, Q.C.: So in this context for the  
61 island interconnected system, that would include  
62 Newfoundland Power, the rural interconnected customers  
63 and, to the extent of their firm demand, the island industrial  
64 customers, correct?

65 MR. BRICKHILL: That's correct.

66 MS. HENLEY ANDREWS, Q.C.: And non-firm demand, as  
67 I understand it, is what Hydro used to call its interruptible  
68 A rates for its industrial customers but which is now called  
69 its non-firm rate, and it reflects additional demand that a  
70 customer can request above and beyond its firm demand  
71 subject to availability. Would you agree with that?

72 MR. BRICKHILL: That's correct.

73 MS. HENLEY ANDREWS, Q.C.: And would you also agree  
74 that the rate structures that exist for the industrial  
75 customers versus the rate structure for Newfoundland  
76 Power and the island rural interconnected is such that the  
77 only non-firm, the only customers who can take advantage  
78 or need non-firm demand are the island industrial  
79 customers?

80 MR. BRICKHILL: I believe that's correct.

81 MS. HENLEY ANDREWS, Q.C.: And that is because  
82 neither Newfoundland Power nor the island rural  
83 interconnected customers have a cap or a fixed demand,  
84 correct? They forecast their demand but they don't pay for  
85 demand above and beyond what they forecast as non-firm  
86 rates.

87 MR. BRICKHILL: That's correct.

88 MS. HENLEY ANDREWS, Q.C.: You indicated yesterday  
89 that non-firm, the non-firm industrial rates proposed by  
90 Hydro are based upon incremental cost. Could you explain  
91 what incremental cost is?

92 MR. BRICKHILL: I thought I said marginal cost but in the  
93 case of the interruptible industrials, the rate is based on the  
94 marginal cost experienced by Hydro at the time of use. It's  
95 largely based on, well the rate is I guess 110 percent, if I  
96 recall correctly, of the marginal cost of the Holyrood

1 generation except when peaking turbines are on, in which  
2 case the rate to the industrials is based on the diesel cost.

3 MS. HENLEY ANDREWS, Q.C.: Or the gas turbine costs.

4 MR. BRICKHILL: Well, of the gas turbine.

5 MS. HENLEY ANDREWS, Q.C.: When you talk about  
6 marginal costs you're talking about short-run marginal  
7 costs?

8 MR. BRICKHILL: That's correct.

9 MS. HENLEY ANDREWS, Q.C.: Yesterday in answer to a  
10 question by Ms. Butler you indicated that the non-firm  
11 rates only dealt with short-run marginal cost. Do you recall  
12 that?

13 MR. BRICKHILL: Yes.

14 MS. HENLEY ANDREWS, Q.C.: However, the non-firm  
15 industrial rate proposed by Hydro does contain a demand  
16 charge. Are you aware of that?

17 MR. BRICKHILL: Yes.

18 MS. HENLEY ANDREWS, Q.C.: So short-run marginal cost  
19 would normally be the fuel cost, correct?

20 MR. BRICKHILL: That's correct.

21 MS. HENLEY ANDREWS, Q.C.: But in the case of the non-  
22 firm rates proposed by Hydro for their industrial customers,  
23 because nobody else has a structure that can take  
24 advantage of it or imposes it upon them, depending on  
25 your perspective, there is a mark-up for administrative costs  
26 and there's also a demand charge, correct?

27 MR. BRICKHILL: Correct.

28 MS. HENLEY ANDREWS, Q.C.: So it is not really a short-  
29 run marginal cost rate, wouldn't you agree?

30 MR. BRICKHILL: It is ... the largest single component  
31 would be a marginal cost rate, demand rate, because \$1.50  
32 would not be a large percentage of the total revenues  
33 received from those sales.

34 *(10:00 a.m.)*

35 MS. HENLEY ANDREWS, Q.C.: When you have non-firm  
36 demand, because it is interruptible and Hydro can withdraw  
37 it if it needs its capacity to meet its firm demand, would you  
38 agree that non-firm demand imposes no demand costs on  
39 the system?

40 MR. BRICKHILL: I would agree with that.

41 MS. HENLEY ANDREWS, Q.C.: Well why would there be  
42 a demand component in a non-firm rate?

43 MR. BRICKHILL: In this case it's a matter of rate design  
44 but, rather than cost allocation, but if the interruptible rates

45 were regulated and subject to the cost allocation process,  
46 one would normally not give them a free ride on demand-  
47 related costs. That would violate the free rider principle  
48 that we talked about in Dr. Surekai's testimony from 1992.

49 MS. HENLEY ANDREWS, Q.C.: Now the ...

50 MR. BRICKHILL: So that there, it would be very unlikely  
51 in my experience for interruptible industrial not to pick up  
52 at least some demand costs in its rate.

53 MS. HENLEY ANDREWS, Q.C.: And what would be the  
54 rationale for that?

55 MR. BRICKHILL: That while Hydro doesn't bill generation  
56 for interruptible load, the interruptible customers benefit  
57 from the generation and investment in transmission and  
58 should pay something towards demand costs.

59 MS. HENLEY ANDREWS, Q.C.: And how do you  
60 determine what that something should be?

61 MR. BRICKHILL: I would say that is the element of the  
62 most debate that I have been involved in over the past 30  
63 years. The contribution to demand cost by an interruptible  
64 load is often highly controversial.

65 MS. HENLEY ANDREWS, Q.C.: And that really is because  
66 the whole concept of interruptible load is inconsistent with  
67 the concept of there being a demand-related cost, correct?

68 MR. BRICKHILL: No, not as I just explained.

69 MS. HENLEY ANDREWS, Q.C.: Well, if you're planning  
70 your system for your firm load, which is clearly from the  
71 evidence of Mr. Budgell what Hydro does, and if you are  
72 allocating your costs to your customers in your cost of  
73 service study and apportioning all of your generation cost  
74 or all of your demand costs to your firm customers, then  
75 before you provide any interruptible load you have already  
76 recovered all of your demand costs from your existing firm  
77 customers. Isn't that correct?

78 MR. BRICKHILL: No, and Hydro's rate filing in this case  
79 reflects that or reflects the no to your question. The excess  
80 revenues over allocated costs of the industrials reduces  
81 some of the demand costs of the other customers so that  
82 Hydro is not proposing to collect 100 percent of its demand  
83 costs from its firm customers. Through the crediting  
84 methodology involved in Hydro's cost of service filing, the  
85 customer, the firm customers are only paying demand costs  
86 that are not otherwise being funded by interruptibles.

87 MS. HENLEY ANDREWS, Q.C.: However you told me a  
88 few minutes ago that a nature of, that you don't add  
89 demand, because it's interruptible, you don't influence the  
90 demand cost, if you like, of your system by having  
91 interruptible load, correct?

92 MR. BRICKHILL: That is the common practice, correct.

1 MS. HENLEY ANDREWS, Q.C.: Now I'd like you to go  
2 back to **pages one and two of your testimony**, and you  
3 indicate at the bottom of page one, starting at line 22, that  
4 the evidence that you're going to present is, results from  
5 the study of the distribution system cost classification  
6 study prepared by Foster and Associates, and also to  
7 outline the cost of service methodology changes from the  
8 generic methodology outlined in the Board's 1993 report on  
9 the cost of service methodology inquiry, as well as the 2002  
10 test year cost of service study. When you reference at the  
11 top of page two the outline of cost of service methodology  
12 changes from the generic methodology outlined in the  
13 Board's 1993 report, do you agree that this hearing is based  
14 upon the 1993 generic methodology, that the cost of  
15 service for this hearing is supposed to be based upon the  
16 1993 generic methodology?

17 MR. BRICKHILL: That's correct.

18 MS. HENLEY ANDREWS, Q.C.: And that there is in fact a  
19 ... have you been provided a copy of the Board order to  
20 that effect?

21 MR. BRICKHILL: Yes, I have.

22 MS. HENLEY ANDREWS, Q.C.: So when you indicate that  
23 you're looking at the outline of the, you're going to outline  
24 the methodology changes, am I correct that the only  
25 changes that you have contemplated in your evidence are  
26 in relation to issues which the Board indicated in 1993 it  
27 was prepared to further review, in other words, the interim  
28 findings of the Board in 1993, or have you gone beyond  
29 that?

30 MR. BRICKHILL: Offhand I can think of one instance  
31 when we went beyond that. We utilized a system load  
32 factor for classification purposes in Labrador which wasn't  
33 entirely consistent with the Board's decision in 1993 but we  
34 felt it was more important to be consistent with the island  
35 cost of service than to be consistent with what the Board  
36 seemed to be saying in 1993.

37 MS. HENLEY ANDREWS, Q.C.: And with respect to the  
38 other methodology changes which are discussed in your  
39 evidence, to the best of your knowledge are they limited to  
40 those items upon which the Board had indicated in 1993  
41 that its findings were interim?

42 MR. BRICKHILL: No. As I thought I just explained, we  
43 deviated in Labrador.

44 MS. HENLEY ANDREWS, Q.C.: Yes, but with that  
45 exception, the rest of your changes.

46 MR. BRICKHILL: I believe that's correct.

47 MS. HENLEY ANDREWS, Q.C.: In terms of the  
48 systemization, which you indicated earlier was done by  
49 Newfoundland and Labrador Hydro, did Foster Associates

50 have any involvement in that process or provide any  
51 advice to Hydro with respect to that process?

52 MR. BRICKHILL: I don't believe so.

53 MS. HENLEY ANDREWS, Q.C.: With respect to  
54 functionalization, was that done entirely by Hydro or did  
55 Foster Associates play a role with respect to  
56 functionalization?

57 MR. BRICKHILL: We were briefed and on occasion asked  
58 advice on functionalization.

59 MS. HENLEY ANDREWS, Q.C.: In what areas of  
60 functionalization did you provide advice on?

61 MR. BRICKHILL: I didn't hear the end of the question.

62 MS. HENLEY ANDREWS, Q.C.: I'm sorry. What aspects  
63 of functionalization did Foster Associates provide advice  
64 on?

65 MR. BRICKHILL: It was allocation of common costs.

66 MS. HENLEY ANDREWS, Q.C.: What aspect of allocation  
67 of common costs?

68 MR. BRICKHILL: The use of plant, original cost plant or  
69 gross plant to allocate certain administrative costs.

70 MS. HENLEY ANDREWS, Q.C.: Any other ...

71 MR. BRICKHILL: And then when Hydro made some  
72 changes in that we approved of the changes that were  
73 made.

74 MS. HENLEY ANDREWS, Q.C.: What types of changes,  
75 changes with respect to the original and gross plant on  
76 administrative costs or other changes?

77 MR. BRICKHILL: Gross plant on administrative costs.  
78 Hydro modified the cost of service to allocate transmission  
79 and rural operations administrative costs solely to  
80 distribution and transmission and none to generation.

81 MS. HENLEY ANDREWS, Q.C.: And would this be  
82 different from what had been approved in the 1993 cost of  
83 service methodology?

84 MR. BRICKHILL: I don't recall if the Board addressed that  
85 issue or ... I don't even think that issue was raised in the  
86 hearing, the allocation of such overhead costs.

87 MS. HENLEY ANDREWS, Q.C.: But you would agree that  
88 in looking at the cost of service methodology that was put  
89 forward by Hydro at the time of that hearing, which took  
90 place in 1992 but the decision was filed in 1993, that  
91 components of the cost of service methodology may not  
92 have been specifically addressed by the Board or by the  
93 witnesses but that overall the methodology that was  
94 approved would have inherent in it those types of  
95 judgements and those types of allocations?

1 MR. BRICKHILL: Yes.

2 MS. HENLEY ANDREWS, Q.C.: So that when the Board  
3 approved the cost of service methodology in 1993, based  
4 upon the cost of service studies that were put forward in  
5 1993, inherent in those studies is an assumption that  
6 everything will remain the same except as otherwise  
7 directed by the Board, wouldn't you agree?

8 MR. BRICKHILL: No, I wouldn't, but this was an issue  
9 before us. Should we continue something of practice  
10 which now we believe to have been an error or should we  
11 blindly follow exactly what was done in 1992? We made  
12 the judgement that we should correct errors. As a legal  
13 matter, if we shouldn't have done it, I apologize, because I  
14 contributed to that decision to correct errors where we  
15 found them.

16 MS. HENLEY ANDREWS, Q.C.: My question really relates  
17 more to the fact that I don't recall anything in your  
18 evidence indicating that that type of change was made. Is  
19 that correct?

20 MR. BRICKHILL: As of the filing of my initial evidence,  
21 the TRO change had not been yet made.

22 MS. HENLEY ANDREWS, Q.C.: And when was it made?

23 MR. BRICKHILL: I don't recall if it was my second revised  
24 or third revised actually but it was reflected in one of those  
25 cost of service revisions.

26 MS. HENLEY ANDREWS, Q.C.: So it's reflected in the cost  
27 of service revision, but if I was reviewing your second  
28 supplemental testimony or your third supplemental  
29 testimony, there would be nothing in that that would red  
30 flag me to indicate that there has been this change in the  
31 methodology or in the use of the methodology, would you  
32 agree?

33 MR. BRICKHILL: If that's the case, it was an oversight.  
34 Since it was filed along with Mr. Reeves' testimony where  
35 he noted this change, I may not have been specific about  
36 it. I think I did say the revisions reflected the changes  
37 being discussed by Mr. Reeves, but I can't be absolutely  
38 sure of that.

39 *(10:15 a.m.)*

40 MS. HENLEY ANDREWS, Q.C.: Okay. When you ... in  
41 terms of the assignments between common plant and  
42 specifically assigned plant, did Foster Associates have any  
43 role in the decisions or the changes made by Hydro with  
44 respect to plant assignment?

45 MR. BRICKHILL: No.

46 MS. HENLEY ANDREWS, Q.C.: I'd like you to take a look  
47 at the **evidence of Hubert Budgell on pages, starting on**  
48 **page 16**, and if you look, if you could, Mr. O'Rielly, just

49 scroll down a little bit. Thank you. You can see starting at  
50 line 22 the definition of common plant, as defined as "Plant  
51 that is of substantial benefit to two or more firm  
52 customers." Would you agree that that is the, a fairly well-  
53 accepted definition of common plant?

54 MR. BRICKHILL: Yes, and I believe it's right out of the  
55 Board's 1993 decision, but that is an accepted definition of  
56 common plant.

57 MS. HENLEY ANDREWS, Q.C.: Not just in this  
58 jurisdiction but in other jurisdictions.

59 MR. BRICKHILL: That's correct.

60 MS. HENLEY ANDREWS, Q.C.: What is meant by  
61 substantial benefit?

62 MR. BRICKHILL: Material benefit.

63 MS. HENLEY ANDREWS, Q.C.: Would you agree that a  
64 substantial benefit should be more than speculative?

65 MR. BRICKHILL: Yes.

66 MS. HENLEY ANDREWS, Q.C.: And you can see if you  
67 look down the page, starting at line 26, that Hydro has  
68 outlined certain guidelines or rules to guide it in deciding  
69 what is common and what is not. I think ... was your advice  
70 or the advice of Foster and Associates sought with respect  
71 to those rules or guidelines?

72 MR. BRICKHILL: My opinion was sought. Hubert went  
73 over things he had done with me to see if I thought what he  
74 had done was reasonable and I thought what he had done  
75 was reasonable, but I think I'd have to regard it more as a  
76 briefing than a participation in the actual decision-making  
77 process.

78 MS. HENLEY ANDREWS, Q.C.: So Mr. Budgell appears to  
79 have been the person who made the decision or Hydro  
80 made the decision, would you agree, as to what they  
81 should be?

82 MR. BRICKHILL: Yes.

83 MS. HENLEY ANDREWS, Q.C.: Did you suggest any  
84 changes?

85 MR. BRICKHILL: No.

86 MS. HENLEY ANDREWS, Q.C.: Were you asked to  
87 suggest changes?

88 MR. BRICKHILL: I think in the context of our discussions  
89 if I had thought of any changes that should have been  
90 made I would have offered them but I didn't.

91 MS. HENLEY ANDREWS, Q.C.: Were you provided with  
92 a copy of the rules or guidelines that Hydro has used in the  
93 past, for example, at the last rate hearing?

1 MR. BRICKHILL: It is my understanding they followed the  
2 same rules or guidelines at the last hearing but discovered  
3 for this case changes that they thought should be made.

4 MS. HENLEY ANDREWS, Q.C.: In the guidelines or in the  
5 assignments?

6 MR. BRICKHILL: In the assignments.

7 MS. HENLEY ANDREWS, Q.C.: So you haven't reviewed  
8 the rules or guidelines that have previously existed but you  
9 believe that they are the same?

10 MR. BRICKHILL: Yes, but the facts have changed. For  
11 example, in the last case, Great Northern Peninsula was not  
12 part of the interconnected system so that now, now that  
13 they are, judgements had to be made as to how to treat  
14 certain assets on the GNP portion of the interconnected  
15 system.

16 MS. HENLEY ANDREWS, Q.C.: That is correct, but you  
17 did indicate to me a few moments ago that you had no  
18 involvement in that decision-making process.

19 MR. BRICKHILL: That's correct, except for briefing and my  
20 opinions, if any, on what they had done.

21 MS. HENLEY ANDREWS, Q.C.: I asked you whether,  
22 about 10 or 15 minutes ago, whether your advice had been  
23 sought with respect to decisions on assignment of plant  
24 and I understood that you told me no, and then I  
25 subsequently understood from you that you were  
26 consulted with respect to these guidelines. In other words,  
27 Hydro made the decision as to what the guidelines would  
28 be and they were run by you, but I had not previously  
29 understood from you that you'd had any involvement in  
30 the decision-making process as to whether specific  
31 assignment would be common or specifically assigned.

32 MR. BRICKHILL: As I explained earlier, I was briefed on  
33 what was done, asked if I thought it was reasonable, and I  
34 gave my opinion that it was reasonable, so I can't say to  
35 what extent I participated in the decision-making process.  
36 I view it as, no, I didn't participate in the decision-making  
37 process but I was briefed on the issues.

38 MS. HENLEY ANDREWS, Q.C.: So in answer to the  
39 specific question that I asked, which was, was your advice  
40 sought by Hydro with respect to assignments, the answer  
41 is yes or no?

42 MR. BRICKHILL: I interpret what I have just explained as  
43 no because I wasn't asked about it before it was done. I  
44 was told about it after it was done.

45 MS. HENLEY ANDREWS, Q.C.: Okay. So at the time that  
46 you, your opinion was sought, it was already a fait  
47 accompli?

48 MR. BRICKHILL: Let's say a near fait accompli, if ... that's

49 absolutely nutty (phonetic). You know, I've seen ten cases  
50 where that's been rejected ... I think maybe they would have  
51 reconsidered, but I didn't say that.

52 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
53 part, that an important part of assessing the rules that are  
54 reflected on the bottom of page 16 and the top of page 17  
55 is to determine whether the result of the application of  
56 those rules fits with the definition of common plant?

57 MR. BRICKHILL: Again, repeat that question please.

58 MS. HENLEY ANDREWS, Q.C.: Okay. Let me phrase it a  
59 little more simply. We have a definition of common plant  
60 that says that plant is common if it's of substantial benefit  
61 to two or more firm customers, correct?

62 MR. BRICKHILL: Correct.

63 MS. HENLEY ANDREWS, Q.C.: So in valuating the  
64 guidelines or the rules that have been adopted by Hydro  
65 for determining what is common, first we need to determine  
66 whether the application of those rules results in a  
67 determination of whether there is a substantial benefit or  
68 not to two or more customers.

69 MR. BRICKHILL: That's correct.

70 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
71 in a regulated environment the role of the Board is to  
72 determine whether Hydro's interpretation of the definition  
73 of common plant is reasonable?

74 MR. BRICKHILL: That's correct.

75 MS. HENLEY ANDREWS, Q.C.: And would you also agree  
76 that if one of these guidelines or rules results in treating as  
77 common an asset that is not of substantial benefit to more  
78 than one class of customers, then the rule is not fair?

79 MR. BRICKHILL: I would say the application of the rule  
80 was incorrect if it was not of substantial to two or more  
81 customers.

82 MS. HENLEY ANDREWS, Q.C.: I'd like to refer you to **page**  
83 **two of Mr. Hamilton's** evidence, and I'm not going to go  
84 through all of them, but it is my understanding that James  
85 Bond Bright (phonetic) is sort of regarded as the guru  
86 when it comes to the principles of public utility rates, is that  
87 correct? His principles are often referred to and applied in  
88 a general way?

89 MR. BRICKHILL: That's correct.

90 MS. HENLEY ANDREWS, Q.C.: And when you look at Mr.  
91 Hamilton's evidence starting at line 17, looking at rate  
92 design, one of the issues is that rates should allocate costs  
93 fully and fairly among customers and avoid undue  
94 discrimination within the limits of reasonable practicality.  
95 You would agree with that?



- 1 MR. BRICKHILL: Yes.
- 2 MS. HENLEY ANDREWS, Q.C.: And above it on market  
3 efficiency would you also agree that rates should  
4 discourage wasteful use of service?
- 5 MR. BRICKHILL: Correct.
- 6 MS. HENLEY ANDREWS, Q.C.: And while promoting  
7 types and amounts of use that are economically justified.
- 8 MR. BRICKHILL: Correct.
- 9 MS. HENLEY ANDREWS, Q.C.: And similarly when it  
10 comes to stability, rates should be stable in the sense that  
11 they should generate the amount of the revenue  
12 requirement in a stable manner from year to year and month  
13 to month?
- 14 MR. BRICKHILL: Particularly prefaced by the, to the extent  
15 possible.
- 16 MS. HENLEY ANDREWS, Q.C.: Yes.
- 17 MR. BRICKHILL: Hydro is proposing a rate increase, that's  
18 not a stable rate, but Hydro wants to collect its cost of  
19 service, its revenue requirements, so they're asking for a  
20 rate increase.
- 21 MS. HENLEY ANDREWS, Q.C.: When you look at the  
22 second sentence in these principles which apparently come  
23 from Bond Bright, it indicates that the rates should also be  
24 relatively stable with a minimum of unexpected changes to  
25 facilitate both customer and company planning for the  
26 future. Would you agree with that?
- 27 MR. BRICKHILL: Yes, I would.
- 28 *(10:30 a.m.)*
- 29 MS. HENLEY ANDREWS, Q.C.: And in order to do that,  
30 would you agree that the cost of service or the application  
31 of the cost of service would have to remain fairly  
32 consistent, obviously subject to approved changes by the  
33 Board, in order to also achieve that relative stability?
- 34 MR. BRICKHILL: Yes, but again it has to be to the extent  
35 possible since the cost of service approved by the Board  
36 in this case is not the same cost of service methodology  
37 that's been applied in the past.
- 38 MS. HENLEY ANDREWS, Q.C.: Do you agree ... thank  
39 you, Mr. O'Reilly. Do you agree that a fundamental  
40 concern in cost-based rates is ensuring that customers are  
41 charged rates that reflect the overall costs that their  
42 electricity use places on the system?
- 43 MR. BRICKHILL: Yes.
- 44 MS. HENLEY ANDREWS, Q.C.: And doesn't this mean  
45 that part of the analysis is whether a particular class of  
46 customers has caused or partially caused the costs under  
47 consideration?
- 48 MR. BRICKHILL: Yes.
- 49 MS. HENLEY ANDREWS, Q.C.: And when you're looking  
50 at cost causation regarding assets, do you look at the  
51 origin of the costs, in other words, the reason they were  
52 incurred in the first place, or the current reason why the  
53 costs are being incurred or both?
- 54 MR. BRICKHILL: That is an issue of contention in some  
55 cases. I believe one could look at both. I think interpreting  
56 the Board's 1993 decision, where it talked about use of the  
57 system load factor method, the Board kind of rejected the  
58 idea of what it was originally built for or placed in service  
59 for and rather lean towards a method that looked at what it  
60 does now, so I, it's my feeling in this case, following that  
61 guideline from the Board, that we would look at the current  
62 use of that asset rather than the original purpose of that  
63 asset, but I'm not saying that if somebody suggests you  
64 ought to look at the original purpose of an asset that  
65 they're off base. That is not an uncommon practice.
- 66 MS. HENLEY ANDREWS, Q.C.: So weight is often  
67 attached to both elements, you would agree?
- 68 MR. BRICKHILL: Yes.
- 69 MS. HENLEY ANDREWS, Q.C.: Once an asset has been  
70 assigned properly, and I'm talking at an initial stage, either  
71 to a common plant category or a specifically-assigned plant  
72 category, in your opinion what would have to happen to  
73 justify a change from one to the other?
- 74 MR. BRICKHILL: Either discovery of an error in its  
75 assignment to begin with or if the utilization of that asset  
76 has changed since it was assigned one way or the other.
- 77 MS. HENLEY ANDREWS, Q.C.: So in the absence of  
78 mistake, and my question was premised on it having been  
79 properly assigned in the first place, so in the absence of  
80 mistake circumstances would have to change regarding the  
81 use of that asset in order for it to move from common to  
82 specifically assigned or from specifically assigned to  
83 common.
- 84 MR. BRICKHILL: That's correct.
- 85 MS. HENLEY ANDREWS, Q.C.: Or you could show that if  
86 in fact it had been an asset that had previously  
87 substantially benefitted more than one class of customers  
88 and it no longer substantially benefitted more than one  
89 (inaudible) of customers, that might be a factor?
- 90 MR. BRICKHILL: Yes, I believe that's a sub-category of a  
91 change in circumstances.
- 92 MS. HENLEY ANDREWS, Q.C.: That's because of the  
93 definition of common plant.

1 MR. BRICKHILL: That's correct.

2 MS. HENLEY ANDREWS, Q.C.: Would you also agree  
3 that in order to change an asset from specifically assigned  
4 to common, circumstances would have to change to  
5 demonstrate that another class of customers is now  
6 receiving a substantial benefit from that asset?

7 MR. BRICKHILL: That's correct.

8 MS. HENLEY ANDREWS, Q.C.: Would you agree that if  
9 an asset is treated as common then the amount which each  
10 class is asked to contribute should be a reasonable proxy  
11 for its contribution to the cause of those costs?

12 MR. BRICKHILL: To the extent feasible and practical, yes.

13 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
14 if a customer is asked to contribute much more to the cost  
15 than the benefit it is likely to receive, then there is a  
16 fairness problem?

17 MR. BRICKHILL: There could be a fairness problem but  
18 evaluating benefits is a subjective exercise and cost of  
19 service can't be considered so precise that you have an  
20 exact matching of costs and benefits, so I think in some  
21 circumstances some customers may pay a little bit more  
22 than the benefits they derive and probably in some  
23 instances much more than they derive, and hopefully it falls  
24 out and it works both ways across the cost allocation  
25 system.

26 MS. HENLEY ANDREWS, Q.C.: But generally speaking  
27 the aim of the process is to get as close to cost causation  
28 as is reasonably possible, you would agree?

29 MR. BRICKHILL: That is the aim of the process but the  
30 practical aspect of the process is it's an allocation  
31 methodology. If we could specifically identify all the  
32 facilities used by all the customers and how much they use  
33 them, and therefore specifically assign everything, I  
34 wouldn't be here, we wouldn't have a cost allocation  
35 process.

36 MS. HENLEY ANDREWS, Q.C.: The more difficult aspect  
37 of it really though is once an asset has been treated as  
38 common, is finding a match for cost causation within the,  
39 between the classes of customers who are billed for that  
40 asset, wouldn't you agree, that it's ... the difficulty in, once  
41 an asset is treated as common, the real difficulty is finding  
42 a method of allocation that indicates that Newfoundland  
43 Power pays its proportionate share of use and industrials  
44 and island interconnected rurals, that that's the real  
45 difficulty in looking at the costs, but you can do a  
46 reasonable job when you're talking about specifically  
47 assigned versus common, wouldn't you agree?

48 MR. BRICKHILL: You should be able to do a better job at  
49 specific assignment, more precisely matching costs with

50 causality than with allocation.

51 MS. HENLEY ANDREWS, Q.C.: Thank you. There's been  
52 a lot of ... there's a lot of reference in evidence and there's  
53 a lot of reference, like in the pre-filed evidence as well as in  
54 the cross-examination, to the grid and connection to the  
55 grid. What do you consider the grid to be?

56 MR. BRICKHILL: I consider the grid to be the transmission  
57 facilities for the island interconnected and for the Labrador  
58 interconnected systems, and there should be two separate  
59 grids.

60 MS. HENLEY ANDREWS, Q.C.: All of the transmission  
61 facilities or only the substantial components of the  
62 transmission facilities?

63 MR. BRICKHILL: In my view, it would be all of the  
64 transmission facilities that connect generation with load  
65 service.

66 MS. HENLEY ANDREWS, Q.C.: What do you consider a  
67 radial line to be?

68 MR. BRICKHILL: I would consider a radial line to be a line  
69 connecting generation to the grid or connecting a load  
70 centre with the grid.

71 MS. HENLEY ANDREWS, Q.C.: When you ... I just want  
72 to move on to the Great Northern Peninsula  
73 interconnection. Are you familiar with the St.  
74 Anthony/Roddickton interconnection on the Great  
75 Northern Peninsula?

76 MR. BRICKHILL: Generally, yes.

77 MS. HENLEY ANDREWS, Q.C.: Are you aware that prior  
78 to interconnection all generation in the St.  
79 Anthony/Roddickton area was specifically assigned to the  
80 Hydro rural class?

81 MR. BRICKHILL: Yes, I am.

82 MS. HENLEY ANDREWS, Q.C.: And that it was  
83 constructed for, to provide service to them as an isolated  
84 system.

85 MR. BRICKHILL: That's correct.

86 MS. HENLEY ANDREWS, Q.C.: I'd like you to take a look  
87 at **IC-125**, and first the questions, and the first question  
88 was, "Which customer classes benefitted from the  
89 interconnection?" Would you read out the answer to one?

90 MR. BRICKHILL: "There were three customer classes that  
91 changed due to system interconnection. These were rate  
92 1.2, domestic diesel; rate 1.23, churches, schools and  
93 community halls; and rate 2.5, general service diesel. All of  
94 these classes benefitted from the interconnection."

95 MS. HENLEY ANDREWS, Q.C.: You would agree that

1 there's no reference in that answer to either Newfoundland  
2 Power or the industrial customers?

3 MR. BRICKHILL: That's correct.

4 MS. HENLEY ANDREWS, Q.C.: Now when you go to  
5 question two it says, "How did each benefit and quantify  
6 the amount of the benefit," there's a table, and if we could  
7 move down just a little bit, Mr. O'Rielly. When you look at  
8 the actual 2000 revenue and the revenue at diesel rates, you  
9 would agree that the cost savings for the rural  
10 interconnected customers from going from an isolated  
11 system to the interconnected is in the range of \$3 million a  
12 year?

13 MR. BRICKHILL: That's correct.

14 MS. HENLEY ANDREWS, Q.C.: The third question, if we  
15 could move back up, was, "Did the interconnection  
16 increase the revenue requirement to any class of customers,  
17 and, if so, which class or classes and by how much?" The  
18 answer was that, "Costs on a hypothetical non-  
19 interconnected basis or isolated basis are no longer  
20 tracked." Ms. Butler asked you yesterday about keeping  
21 track of the deficit. Do you recall that?

22 *(10:45 a.m.)*

23 MR. BRICKHILL: Yes.

24 MS. HENLEY ANDREWS, Q.C.: If you do not track the  
25 costs even on a hypothetical basis, how can you determine  
26 whether your capital cost to interconnect has had the  
27 desired financial results?

28 MR. BRICKHILL: If, as Hydro did, they estimated it was  
29 beneficial to attach the Great Northern Peninsula  
30 customers, sought and received Board approval based  
31 upon certain capital cost estimates and then found that  
32 their actual capital costs were 4 or \$5 million less, I would  
33 say they know they met their objectives.

34 MS. HENLEY ANDREWS, Q.C.: On the other hand if part  
35 of the cost benefit analysis included an assumption with  
36 respect to maintenance costs, for example, of the  
37 transmission lines, and the actual maintenance experience  
38 of these very long transmission lines turned out to be  
39 substantially different from what had been hypothesized at  
40 the time of the cost benefit analysis, that 4 to \$5 million  
41 savings does not take that into account, does it?

42 MR. BRICKHILL: No, it wouldn't.

43 MS. HENLEY ANDREWS, Q.C.: I'd like to go to **IC-147**,  
44 Mr. O'Rielly, and in particular, Mr. Brickhill, having just  
45 established that neither Newfoundland Power nor the  
46 industrial customers are cited by Hydro as having been the  
47 beneficiaries of the interconnection, the question was  
48 asked to provide a chart showing the number of times each

49 unit has been used in each year since it became  
50 interconnected, the reason it was used on each occasion  
51 and the class of customers in need of emergency or  
52 peaking capacity on each occasion. And if you look at the  
53 answer to number two, there's a table that shows the  
54 number of times that the units were used, and then down  
55 below there is an explanation, and you can see that ... oh,  
56 would you read out the answer starting at line seven?

57 MR. BRICKHILL: The Hawke's Bay diesels have been used  
58 to maintain acceptable voltages to Hydro rural customers  
59 during scheduled or forced outages on the Great Northern  
60 Peninsula. Prior to the construction of additional lines per  
61 (unintelligible) 1990 on the Great Northern Peninsula,  
62 Hawke's Bay diesels were used regularly to maintain  
63 acceptable voltage to Hydro rural customers with all  
64 available transmission and service. As well it was used to  
65 supply generation requirements for the entire system on  
66 January 2nd, 1996. It helped meet the peak of 1303 MW on  
67 that day. Hawke's Bay diesels were also on for system  
68 support prior to 1992. One known case identified from a  
69 record peak report is February 3, 1990. On that day it was  
70 on to meet a system peak of 31, 1316 MW. On both of  
71 these occasions Hawke's Bay diesels served all customer  
72 classes."

73 MS. HENLEY ANDREWS, Q.C.: Would you agree that ...  
74 if we scroll back up again, thank you ... that there is no  
75 reference in that text starting at line seven to any use of the  
76 St. Anthony diesel or the Roddickton diesel for the  
77 system?

78 MR. BRICKHILL: That is correct.

79 MS. HENLEY ANDREWS, Q.C.: Notwithstanding the  
80 number of times that those units have been used since  
81 1996?

82 MR. BRICKHILL: That's correct.

83 MS. HENLEY ANDREWS, Q.C.: And would you also agree  
84 that if you do a rough calculation of the number of times  
85 that the Hawke's Bay diesel has been used since 1992, it's  
86 somewhere in excess of or roughly 60 times.

87 MR. BRICKHILL: That sounds right.

88 MS. HENLEY ANDREWS, Q.C.: It might be a little more  
89 than 60. And the evidence is that on only one of those  
90 occasions the Hawke's Bay diesel was used to meet a  
91 system peak for the benefit of all the customers.

92 MR. BRICKHILL: I thought it was twice.

93 MS. HENLEY ANDREWS, Q.C.: No. Once in the period  
94 1992 to 2000 and then there's also a reference to one  
95 identified case in 1990, which is before the time period in  
96 the chart.

- 1 MR. BRICKHILL: That's correct.
- 2 MS. HENLEY ANDREWS, Q.C.: That is not substantial,  
3 would you agree?
- 4 MR. BRICKHILL: I would not agree that it couldn't be  
5 deemed substantial.
- 6 MS. HENLEY ANDREWS, Q.C.: The experience shown in  
7 the chart would indicate that it is an extremely rare  
8 occurrence for any of those units to be used for the  
9 system. You would agree?
- 10 MR. BRICKHILL: I would agree that it's a rare occurrence  
11 but in the absence of these units Hydro may have installed  
12 an additional unit somewhere else.
- 13 MS. HENLEY ANDREWS, Q.C.: Perhaps on a much  
14 shorter transmission line.
- 15 MR. BRICKHILL: Perhaps.
- 16 MS. HENLEY ANDREWS, Q.C.: If you look ... would you  
17 look at IC ... could we look at **IC-134**, and I think there's a  
18 chart. Could we enlarge it, please? If you look at the chart  
19 that's attached to IC-134 ... first of all let's go back to the  
20 question, Mr. O'Rielly. It says to list the changes in  
21 assignment on the island interconnected system and the  
22 cost impact that each change has on the three customer  
23 classes. Now we can go back to the ... you can see, Mr.  
24 Brickhill, that in the second line dealing with the Great  
25 Northern Peninsula transmission assets reassigned from  
26 rural to common that roughly \$9 million is reassigned from  
27 the rural class to Newfoundland Power and industrial as a  
28 result of that change in assignment.
- 29 MR. BRICKHILL: That's correct.
- 30 MS. HENLEY ANDREWS, Q.C.: And with respect to the  
31 St. Anthony/Roddickton system, we've already seen that  
32 generation in St. Anthony and Roddickton has been used  
33 on numerous occasions since interconnection but has  
34 never been used for the benefit of Newfoundland Power  
35 and the industrial customers. We're talking now about  
36 Roddickton and St. Anthony on the previous exhibit, not  
37 Hawke's Bay.
- 38 MR. BRICKHILL: Could we go back to the previous  
39 exhibit?
- 40 MS. HENLEY ANDREWS, Q.C.: Sorry. That was **IC-147**.
- 41 MR. BRICKHILL: If it ... it doesn't explain what the St.  
42 Anthony or Roddickton diesel units have been used for.  
43 I really can't answer your question unless I knew what they  
44 were used for.
- 45 MS. HENLEY ANDREWS, Q.C.: Okay. Well, let's go back  
46 to the question, and it's asked to provide a chart showing  
47 the number of times each unit has been used, the reason it  
48 was used on each occasion and the class of customers in  
49 need of emergency or peaking capacity on each occasion.  
50 And let's go back to the answer again, and then go down  
51 to the bottom. The only indication in the answer as we  
52 previously discussed is that Hawke ... if you go to the third  
53 page, I'm sorry, go to the third page. You can see the  
54 answer for St. Anthony and Roddickton and that it was all  
55 with respect to supplying Hydro rural customers during  
56 forced and scheduled transmission outages. Would you  
57 agree?
- 58 MR. BRICKHILL: Yes, I agree.
- 59 MS. HENLEY ANDREWS, Q.C.: And as a result of the  
60 reassignment, Newfoundland Power and the industrial  
61 customers are being asked to contribute \$9 million a year to  
62 that cost. We can go back ...
- 63 MR. BRICKHILL: That would not be a fair characterization  
64 of the circumstances. The connection of the Great  
65 Northern Peninsula substantially reduced the rural deficit  
66 which Newfoundland Power pays. As best we could  
67 estimate, the addition of the Great Northern Peninsula  
68 reduced the total cost of service for the island, so certainly  
69 ... well, in fact the industrials were paying the rural deficit  
70 so they also got some benefits from the addition of the  
71 Great Northern Peninsula, so as best I can tell, the only  
72 loser, if there was a loser, happened to be Hydro, because  
73 Hydro got lower revenues through the attachment of these  
74 customers and that was several years ago. Hydro has  
75 foregone those revenues ever since and I don't think,  
76 looking at the customers, looking at the total of the system  
77 on the island, there has been an adverse effect.
- 78 MS. HENLEY ANDREWS, Q.C.: Let's talk about the deficit  
79 for a moment. Mr. Chairman, it's probably, as I look at the  
80 clock, probably a reasonable point to break.
- 81 *(11:00 a.m.)*
- 82 MR. NOSEWORTHY, CHAIRMAN: Sure, that'll be fine.  
83 We'll reconvene at 11:15.
- 84 *(break)*
- 85
- 86 *(11:20 a.m.)*
- 87 MR. NOSEWORTHY, CHAIRMAN: Thank you. Can I ask  
88 you to continue, Ms. Henley Andrews, please, with your  
89 cross-examination?
- 90 MS. HENLEY ANDREWS, Q.C.: Thank you, Mr. Chairman.  
91 Mr. Brickhill, when we are talking about assignment of  
92 assets between common and specifically assigned you  
93 would agree that the deficit has nothing to do with it, that  
94 the issue is the definition of common plant?
- 95 MR. BRICKHILL: To the extent the assignment affects the

1 deficit, I think the deficit has something to do with it.

2 MS. HENLEY ANDREWS, Q.C.: However, if you look at  
3 the definition of common plant the analysis that you go  
4 through from a cost of service perspective is whether the  
5 particular plant provides a substantial benefit to two or  
6 more classes of customers, correct?

7 MR. BRICKHILL: That's correct.

8 MS. HENLEY ANDREWS, Q.C.: And the issue of the  
9 deficit is a separate issue? In other words, the decision  
10 that you make on assignment may very well impact the  
11 amount of the deficit, but the deficit, in and of itself, does  
12 not make the answer right or wrong?

13 MR. BRICKHILL: I think in a very broad sense it does,  
14 particularly when you're talking millions of dollars of  
15 reduction in the deficit which is a cost ...

16 MS. HENLEY ANDREWS, Q.C.: Borne by ...

17 MR. BRICKHILL: ... to certain customers.

18 MS. HENLEY ANDREWS, Q.C.: Okay. But doesn't ... given  
19 that, for example, Newfoundland Power does pay, does  
20 contribute to the deficit but the industrial customers do not  
21 contribute to the deficit, the analysis in terms of benefit  
22 would be different for each of those classes of customers,  
23 wouldn't you agree, if you're talking about assignment and  
24 relating it to the deficit?

25 MR. BRICKHILL: I would say no because the industrials  
26 did benefit from the reduction of the deficit, but they no  
27 longer do, and at the time GNP was done it would not have  
28 been appreciated that the industrials wouldn't get a savings  
29 beginning in the year 2000, and probably the most  
30 important aspect of all of this is one doesn't do a cost  
31 benefit analysis strictly for one customer. One looks at the  
32 totality of the circumstances. A prudent planner would  
33 have recognized the benefits as the total system benefits,  
34 as Hydro do. There's been a change in circumstances  
35 where because of an even greater savings for the industrial  
36 they no longer get a smaller savings that they would have  
37 gotten out of the GNP attachment shouldn't affect the  
38 treatment of this plan in looking at the totality of the  
39 circumstances.

40 MS. HENLEY ANDREWS, Q.C.: I think part of the problem  
41 that we're having here is you seem to be addressing the  
42 prudence issue, and my question has absolutely nothing to  
43 do with prudence. I'm dealing with assignment, so as I  
44 understood your testimony earlier, the test for determining  
45 whether particular plant should be treated as common is  
46 whether that there is a substantial benefit from that plant to  
47 two or more classes of customers, correct?

48 MR. BRICKHILL: That's correct.

49 MS. HENLEY ANDREWS, Q.C.: Now, I want to move on  
50 to the ... a couple of the issues that you raised with respect  
51 to the deficit, and you implied that Hydro had taken the hit  
52 or takes the hit from the reduction in revenue from the  
53 interconnected rural class as a result of the change in their  
54 rates, but wouldn't you agree that for the purpose of this  
55 hearing which is the hearing that is setting the rates for  
56 2000, that the reduction in revenue of \$3 million which we  
57 discussed earlier, has to be ... it increases the deficit?

58 MR. BRICKHILL: No, I don't think that's the case.

59 MS. HENLEY ANDREWS, Q.C.: Well, let's just take your  
60 hypothesis as you expressed it earlier, without commenting  
61 on whether I agree or disagree with it, and that is that if the  
62 interconnection reduced costs, in other words, reduced the  
63 operating costs and the capital costs of the Great Northern  
64 Peninsula, there were two ... prior to interconnection there  
65 were two components that made up the deficit, wouldn't  
66 you agree? One was the amount of revenue that Hydro  
67 was receiving from the St. Anthony/Roddickton isolated  
68 system in its rates, correct, that's one of the aspects of that  
69 system, and the other is the cost of operating that system?

70 MR. BRICKHILL: That's correct.

71 MS. HENLEY ANDREWS, Q.C.: So that the deficit for the  
72 St. Anthony/Roddickton isolated system prior to  
73 interconnection would be the difference between the  
74 revenues from its rates and its costs, correct?

75 MR. BRICKHILL: That's correct.

76 MS. HENLEY ANDREWS, Q.C.: And after interconnection  
77 the deficit associated with that portion of the  
78 interconnected system would be the difference between the  
79 revenues from the customers in that area and the costs of  
80 the system that serves them, correct?

81 MR. BRICKHILL: I'd have to check on that to see if the  
82 calculation of the deficit was modified after the attachment  
83 of GNP.

84 MS. HENLEY ANDREWS, Q.C.: Let's ... theoretically then  
85 that would be the case, you would look at the revenues and  
86 you would look at the costs in order to determine what the  
87 amount of the deficit would be?

88 MR. BRICKHILL: That's correct.

89 MS. HENLEY ANDREWS, Q.C.: And if the costs had gone  
90 down, as you suggest they did, and the revenues had also  
91 gone down, then the deficit may or may not go down,  
92 wouldn't you agree? It would depend upon how much the  
93 costs went down relative to how much the revenues went  
94 down?

95 MR. BRICKHILL: Well, I know, for a fact, the deficit did go  
96 down. Therefore, it's not an unknown that maybe the

1 revenues went down as much as the costs went down. I  
2 know for a fact the costs went down more than the  
3 revenues went down.

4 (11:30 a.m.)

5 MS. HENLEY ANDREWS, Q.C.: But wouldn't you agree  
6 that if the revenues had remained the same and the costs  
7 went down the reduction in the deficit would be that much  
8 more?

9 MR. BRICKHILL: That's correct.

10 MS. HENLEY ANDREWS, Q.C.: So that in looking at the  
11 benefits of the St. Anthony/Roddickton interconnection  
12 then you have to look at the impact on revenues as well as  
13 the impact on costs, correct?

14 MR. BRICKHILL: Depending on the timeframe, yes.

15 MS. HENLEY ANDREWS, Q.C.: And I would agree, I  
16 presume, that Hydro could have made an application to this  
17 Board in 1996 to change its rates to incorporate ... to make  
18 itself whole with respect to the Great Northern Peninsula  
19 interconnection if it had wanted to do so?

20 MR. BRICKHILL: It could have, I believe so.

21 MS. HENLEY ANDREWS, Q.C.: Are you aware of the  
22 frequency converters at Grand Falls and Corner Brook?

23 MR. BRICKHILL: Not with any specificity.

24 MS. HENLEY ANDREWS, Q.C.: Okay. Are you aware that  
25 there are frequency converts at Grand Falls and Corner  
26 Brook?

27 MR. BRICKHILL: Now that you say it, I believe you. I  
28 haven't addressed frequency converters to any significant  
29 extent in my work.

30 MS. HENLEY ANDREWS, Q.C.: So is it fair to say that you  
31 were not consulted in any respect by Hydro with respect to  
32 assignment or reassignment of the frequency converters?

33 MR. BRICKHILL: I don't recall one way or another.

34 MS. HENLEY ANDREWS, Q.C.: You had indicated to us  
35 earlier with respect to the Great Northern Peninsula  
36 production and transmission plant, that after Hydro had  
37 made its decision with respect to that it was run by you, or  
38 I think you said you were briefed and given an opportunity  
39 for comments. Were you briefed and given an opportunity  
40 for comments with respect to the frequency converters?

41 MR. BRICKHILL: I don't recall one way or another.

42 MS. HENLEY ANDREWS, Q.C.: Okay. It's my  
43 understanding, from the answers to the information  
44 requests, that the frequency converters serving the Abitibi  
45 mill at Grand Falls and the Corner Brook Pulp and Paper  
46 Mill at Corner Brook were installed in the 1960s when the

47 Bay d'Espoir project was built and that they have since the  
48 1960s always been treated as a common, as common plant,  
49 and Hydro is now proposing that these assets be  
50 specifically assigned. In your view what would have to  
51 change in order for a change in assignment of that nature  
52 to take place?

53 MR. BRICKHILL: The thing that comes to my mind is do  
54 the frequency converters only benefit one customer.

55 MS. HENLEY ANDREWS, Q.C.: And in that regard we  
56 would have to go through the same type of analysis that  
57 we just discussed with respect to the Great Northern  
58 Peninsula, correct?

59 MR. BRICKHILL: I hope we wouldn't, because I'm not very  
60 familiar with the location of the frequency converters.

61 MS. HENLEY ANDREWS, Q.C.: No, I'm not going ... I'm  
62 not ... Mr. Brickhill, I'm hoping that we wouldn't and that's  
63 why I'm asking you the general question, that from a  
64 theoretical perspective, given that you've already told me  
65 that you have no involvement with and very little familiarity  
66 with the frequency converters, that the analysis would be  
67 whether the frequency converters substantially benefit  
68 more than one customer?

69 MR. BRICKHILL: In my mind that's the issue.

70 MS. HENLEY ANDREWS, Q.C.: And whether there was  
71 either a mistake when they were first assigned or some  
72 change in their use which would justify the switch, correct?

73 MR. BRICKHILL: That's correct.

74 MS. HENLEY ANDREWS, Q.C.: There is evidence that  
75 there is street lighting in Bay d'Espoir, to the Community of  
76 Bay d'Espoir, which Hydro treats as a common cost,  
77 although it only serves the class of customers in Bay  
78 d'Espoir, and as with the converters, this street lighting has  
79 always been treated as common. Would you agree that in  
80 looking at that issue we would have to look at whether  
81 there was a mistake in the first case, and if no mistake  
82 whether there had been a significant change so that it  
83 should now fall specifically assigned instead of common,  
84 based on the definition of common plant?

85 MR. BRICKHILL: Yes.

86 MS. HENLEY ANDREWS, Q.C.: We've discussed a little  
87 this morning what constitutes the grid in your estimation,  
88 and one of the issues that I want to ask you a few  
89 questions on is the issue of wheeling. Was your opinion  
90 sought by Hydro with respect to wheeling costs?

91 MR. BRICKHILL: Yes.

92 MS. HENLEY ANDREWS, Q.C.: And in what ... or what  
93 opinion was sought?

1 MR. BRICKHILL: Has there been any change in the  
2 regulatory and costing environment that would indicate  
3 that the way we'd done the wheeling charge in the past  
4 should be modified.

5 MS. HENLEY ANDREWS, Q.C.: And what was your  
6 opinion?

7 MR. BRICKHILL: My opinion was the calculation that was  
8 done in the past was still viable today.

9 MS. HENLEY ANDREWS, Q.C.: Are you familiar where  
10 Grand Falls and Stephenville are on a map of  
11 Newfoundland?

12 MR. BRICKHILL: I could probably get close.

13 MS. HENLEY ANDREWS, Q.C.: Well, perhaps ...

14 MR. BRICKHILL: But I'd feel a lot better if I had a map with  
15 ...

16 MS. HENLEY ANDREWS, Q.C.: Okay. Perhaps we ...

17 MR. BRICKHILL: ... the locations noted.

18 MS. HENLEY ANDREWS, Q.C.: ... could go to Mr. Reeves'  
19 evidence? I think it's his first exhibit, and I think if we go to  
20 page 6. Go back first to page 2. Can you see, Mr. Brickhill,  
21 on the general map, that Stephenville is shown as being on  
22 the western or southwestern portion of the island?

23 MR. BRICKHILL: Yes.

24 MS. HENLEY ANDREWS, Q.C.: And you see a little star  
25 there in the middle that indicates Bishop's Falls?

26 MR. BRICKHILL: Yes.

27 MS. HENLEY ANDREWS, Q.C.: That is close to Grand  
28 Falls, so it's roughly in the centre of the island. Can we go  
29 back to page 6, please? When you look at page 6 you can  
30 see that in the middle of the island where the 230 kV  
31 transmission lines and the 138 kV transmission lines  
32 converge, that is roughly Grand Falls, and if you look to the  
33 west where they ... again, you can see roughly where the  
34 Stephenville area is?

35 MR. BRICKHILL: Yes.

36 MS. HENLEY ANDREWS, Q.C.: Which is, again, at the  
37 end of the 230 kV transmission line. You see that?

38 MR. BRICKHILL: Yes.

39 MS. HENLEY ANDREWS, Q.C.: Okay. The evidence  
40 indicates that Abitibi (inaudible) wheels energy from its  
41 generating facilities in Grand Falls to its mill in Stephenville,  
42 and as you look at the map you can see that there is only  
43 230 kV transmission line between Grand Falls and  
44 Stephenville, correct?

45 MR. BRICKHILL: Correct.

46 MS. HENLEY ANDREWS, Q.C.: The wheeling rate,  
47 however, is based upon the system losses for the entire  
48 transmission system, agreed?

49 MR. BRICKHILL: Yes.

50 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
51 practically the only transmission losses which occur in the  
52 wheeling of the energy from Grand Falls to Stephenville are  
53 the losses on the 230 kV transmission line that connects  
54 them?

55 MR. BRICKHILL: No.

56 MS. HENLEY ANDREWS, Q.C.: Okay. Why not?

57 MR. BRICKHILL: Wheeling on a grid like this doesn't  
58 necessarily result in the power going on a point to point  
59 basis. On a grid like this I'm not sure what direction the  
60 power actually goes in, and for what is essentially an  
61 incidental rate class, I don't think it would justify a power  
62 flow study to determine when and where that power goes.

63 MS. HENLEY ANDREWS, Q.C.: Okay. However, you  
64 would ...

65 MR. BRICKHILL: Let me elaborate. You have a generating  
66 plant right next door. It very well could be the power  
67 moves by displacement that way, not necessarily from the  
68 source, that might go to end up at the Avalon Peninsula or  
69 somewhere along those lines.

70 MS. HENLEY ANDREWS, Q.C.: But you agree that  
71 transmission losses are partially a function of the distance  
72 that energy travels along a transmission line?

73 MR. BRICKHILL: Partially, yes.

74 MS. HENLEY ANDREWS, Q.C.: And when Abitibi puts  
75 energy into the system at Grand Falls to wheel to Abitibi in  
76 Stephenville, it may very well be that energy actually put  
77 into the system is not exactly the same energy that arrives  
78 in Stephenville. I'm not suggesting that it is, but that the  
79 losses, theoretically ... I mean, wheeling is really a  
80 theoretical concept, wouldn't you agree?

81 MR. BRICKHILL: I don't think I'd use that term, but I know  
82 what you're saying, I can accept it subject for this purpose.

83 MS. HENLEY ANDREWS, Q.C.: Okay, so why would you  
84 use the transmission losses of the entire transmission  
85 system in order to calculate a rate from point A to point B?

86 MR. BRICKHILL: You would use the system wide average  
87 as a matter of convenience on a grid like system such as  
88 this because as a practical matter you don't know how far  
89 and over which line the power, the incremental power is  
90 actually going.

91 MS. HENLEY ANDREWS, Q.C.: But it is possible to do a  
92 study in that regard?

1 MR. BRICKHILL: I would say the cost of a proper study  
2 would exceed the historic revenues of the service, and  
3 since there's zero service in the test year I'd have to say a  
4 big study would be a waste of Hydro's valuable time.

5 MS. HENLEY ANDREWS, Q.C.: But it's possible?

6 MR. BRICKHILL: It is possible to do the study.

7 MS. HENLEY ANDREWS, Q.C.: The issue is cost?

8 MR. BRICKHILL: The issue is cost.

9 (11:45)

10 MS. HENLEY ANDREWS, Q.C.: Ms. Butler asked you a lot  
11 of questions yesterday with respect to the CP allocators,  
12 and I apologize if some of my questions are repetition, but  
13 where I'm going isn't, I don't think, so if you'd bear with me.  
14 The Board in its 1993 cost of service methodology report  
15 recommended on an interim basis that a 1-CP allocator be  
16 used, correct?

17 MR. BRICKHILL: Correct.

18 MS. HENLEY ANDREWS, Q.C.: And that's for the purpose  
19 of allocating generation demand costs?

20 MR. BRICKHILL: That's correct.

21 MS. HENLEY ANDREWS, Q.C.: And the coincident peak  
22 is the point in the month or in the year when the  
23 combination of the demands from all of Hydro's customers  
24 on the island interconnected system is at its maximum?

25 MR. BRICKHILL: That's correct.

26 MS. HENLEY ANDREWS, Q.C.: And when we're looking  
27 at loss of load hours in particular in relation to Mr.  
28 Budgell's analysis that you were referred to yesterday, the  
29 analysis, as I understand it, in relation to system capacity,  
30 is what is the probability or how many hours worth of loss  
31 are you likely to have at any given peak, correct?

32 MR. BRICKHILL: That's correct.

33 MS. HENLEY ANDREWS, Q.C.: Now, the 1993 report said  
34 that the Board's decision was interim until Hydro could  
35 present further evidence of the relationship between load  
36 factor and system reserve requirements, correct?

37 MR. BRICKHILL: Correct.

38 MS. HENLEY ANDREWS, Q.C.: And I understood from  
39 your testimony yesterday that while Hydro is now  
40 proposing a 2-CP allocator, you do not consider the use of  
41 a 1-CP allocator to be wrong?

42 MR. BRICKHILL: That's correct.

43 MS. HENLEY ANDREWS, Q.C.: So what is the basis of the  
44 proposed change from a 1-CP allocator to 2-CP allocator?

45 MR. BRICKHILL: I was influenced by the language used  
46 by the Board in 1993 that a study should be undertaken  
47 and used in determining a 1-CP or a multiple CP. In the  
48 absence of that directive I think I would have stayed with  
49 1-CP, but it seems to me the Board said do a study and  
50 base your CP on that study and the study indicated 2-CP.

51 MS. HENLEY ANDREWS, Q.C.: It also indicated that 1-CP  
52 was not wrong?

53 MR. BRICKHILL: That's correct. That is a matter of  
54 judgment when you get down to it. I mean, there was one  
55 day of 60 percent. We went with the two days. The study,  
56 I think, would have supported one day, as well.

57 MS. HENLEY ANDREWS, Q.C.: What's the relationship  
58 between load factor and system reserve requirements?

59 MR. BRICKHILL: I'm not sure I can answer the question.  
60 I really don't understand it.

61 MS. HENLEY ANDREWS, Q.C.: Okay. Does the  
62 relationship between load factor and system reserve  
63 requirements have any impact on the choice of CP  
64 allocators?

65 MR. BRICKHILL: It could, yes.

66 MS. HENLEY ANDREWS, Q.C.: How?

67 MR. BRICKHILL: You would look to see if a different load  
68 factor than your actual load factor would influence the  
69 results, and if you were forecasting such a change in load  
70 factor you might base your analysis on that forecast load  
71 factor rather than your current load factor.

72 MS. HENLEY ANDREWS, Q.C.: Transmission costs are to  
73 be allocated on a 1-CP basis, correct?

74 MR. BRICKHILL: That's correct.

75 MS. HENLEY ANDREWS, Q.C.: Is 2-CP for generation  
76 demand costs inconsistent with that?

77 MR. BRICKHILL: No, I don't think so.

78 MS. HENLEY ANDREWS, Q.C.: Why not?

79 MR. BRICKHILL: One is generation, it's a different activity,  
80 if you will, than transmission. Generation may be modified  
81 or planned for more than 1-CP, transmission investment is  
82 peak, peak and peak.

83 MS. HENLEY ANDREWS, Q.C.: Would you agree that the  
84 use of 1-CP for generation demand cost is more consistent  
85 with other Canadian utilities than 2-CP?

86 MR. BRICKHILL: Yes.

87 MS. HENLEY ANDREWS, Q.C.: I'd like to take a look at  
88 NP-135, and in particular, to look at the loss of load hours  
89 per month. Is that attached? It should be. It's Appendix



1 A. When we look at Table 1 to **NP-135**, I take it that ... I  
2 take it from the left-hand column, which refers to annual  
3 peak and megawatts, that this is a hypothetical example?

4 MR. BRICKHILL: That's my understanding, but Mr.  
5 Budgett did the study.

6 MS. HENLEY ANDREWS, Q.C.: And when you look at  
7 this particular table one of the things that you can see is  
8 how the loss of load hours in the various months change  
9 depending upon the load factor?

10 MR. BRICKHILL: That's correct.

11 MS. HENLEY ANDREWS, Q.C.: And when you look at  
12 this particular table, regardless of the load factor, it's clear  
13 that there is a significant amount, 55 to 70 percent of the  
14 contribution to LOLH is one month?

15 MR. BRICKHILL: That's correct. The majority is in  
16 February.

17 MS. HENLEY ANDREWS, Q.C.: And that the next month  
18 is generally, is January?

19 MR. BRICKHILL: That's correct.

20 MS. HENLEY ANDREWS, Q.C.: And that for the third and  
21 the fourth months the contribution is relatively small as a  
22 percentage?

23 MR. BRICKHILL: That's my interpretation, yes.

24 MS. HENLEY ANDREWS, Q.C.: It doesn't matter what  
25 month the peak occurs, does it?

26 MR. BRICKHILL: Not to me, no.

27 MS. HENLEY ANDREWS, Q.C.: Okay, but it does appear  
28 from Mr. Brockman's testimony that he puts a fair amount  
29 of emphasis on the four months from January to March?

30 MR. BRICKHILL: That's correct.

31 MS. HENLEY ANDREWS, Q.C.: And that is different from  
32 your evidence?

33 MR. BRICKHILL: That's correct.

34 MS. HENLEY ANDREWS, Q.C.: What evidence would you  
35 need to justify four CP?

36 MR. BRICKHILL: In my opinion, it would be required to  
37 show that there are four peaks, four different months of  
38 approximately the same amount.

39 MS. HENLEY ANDREWS, Q.C.: The same magnitude?

40 MR. BRICKHILL: Yes.

41 MS. HENLEY ANDREWS, Q.C.: And in the examples that  
42 you gave yesterday from the American experience you  
43 might find that there were peak months in the winter and  
44 peak months in the summer due to air conditioning,

45 correct?

46 MR. BRICKHILL: That's correct.

47 MS. HENLEY ANDREWS, Q.C.: But it doesn't matter what  
48 the months are, the issue is whether there is one month,  
49 two months, three months, or four months that contribute  
50 to that demand?

51 MR. BRICKHILL: That's correct.

52 MS. HENLEY ANDREWS, Q.C.: Or to that peak. In one of  
53 the questions yesterday you were referred to **NP-157**, and  
54 if we could go, Mr. O'Rielly, oh, there it is, to 1992, which is  
55 at the bottom of the page. Newfoundland Power suggested  
56 to you that the peak month for 1992 was January, and I  
57 think the transcript would reflect, and you agreed with her,  
58 but I would like you to look at the data for the Hydro  
59 system peak megawatts and confirm to me whether, in fact,  
60 it's January or March?

61 MR. BRICKHILL: It appears to be March.

62 MS. HENLEY ANDREWS, Q.C.: And in her cross-  
63 examination Ms. Butler indicated to you that in the years  
64 that were used all of the peaks had been January and  
65 February but that isn't correct, right?

66 MR. BRICKHILL: That's correct. One of the years it was  
67 March.

68 MS. HENLEY ANDREWS, Q.C.: But it really doesn't matter  
69 what month?

70 MR. BRICKHILL: It doesn't matter to me or Hubert.

71 MS. HENLEY ANDREWS, Q.C.: Okay. Or me. Could we  
72 go to Mr. Brickhill's Schedule 2, please? As I understood  
73 your testimony this schedule deals with stability, correct?

74 MR. BRICKHILL: That's correct.

75 MS. HENLEY ANDREWS, Q.C.: And it is my  
76 understanding of your evidence, based upon your  
77 Schedule 2, that you do not consider stability to be a factor  
78 with respect to a choice of 1-CP or 2-CP, is that correct?

79 MR. BRICKHILL: No, that's not correct. I'd consider it a  
80 test, but not necessarily a selection criterion.

81 MS. HENLEY ANDREWS, Q.C.: And the test, as I  
82 understood you yesterday, and I now do recall you  
83 specifically using the term "test" yesterday, is whether  
84 when you do this analysis whether there is too much of a  
85 difference between the use of the different allocators,  
86 correct?

87 MR. BRICKHILL: That's correct.

88 MS. HENLEY ANDREWS, Q.C.: And yesterday you were  
89 referred to the Newfoundland Power data, but you actually  
90 in doing the analysis have to look at all of the data, correct?

1 MR. BRICKHILL: That's correct.

2 MS. HENLEY ANDREWS, Q.C.: Okay. Thank you, Mr.  
3 O'Rielly. I want to ask you some questions on, I suppose  
4 what for want of a better term, could be dispatchable  
5 reduction in demand. Clearly, you are aware of the  
6 curtailable rate that is available to Abitibi in Stephenville?

7 MR. BRICKHILL: That's correct.

8 MS. HENLEY ANDREWS, Q.C.: That is generally, or has  
9 been known as the interruptible B rate, correct?

10 MR. BRICKHILL: Correct.

11 MS. HENLEY ANDREWS, Q.C.: And in addition there was  
12 some discussion yesterday with respect to the generation  
13 credit for Newfoundland Power?

14 MR. BRICKHILL: Correct.

15 MS. HENLEY ANDREWS, Q.C.: And would you agree  
16 with me that when you look at your cost of service studies  
17 that are attached, the various ones that you have done,  
18 that it is very easy to see exactly the dollar amount of the  
19 credit to Abitibi in Stephenville for its curtailable power?

20 MR. BRICKHILL: I agree.

21 MS. HENLEY ANDREWS, Q.C.: And would you also agree  
22 that you cannot determine from looking at the cost of  
23 service study exactly what the dollar value of the  
24 compensation is to Newfoundland Power?

25 MR. BRICKHILL: That's correct.

26 *(12:00 noon)*

27 MS. HENLEY ANDREWS, Q.C.: Yesterday Newfoundland  
28 Power referred you to **IC-251(c)**, page 3 of 94.

29 MR. O'RIELLY: It's not there.

30 MS. HENLEY ANDREWS, Q.C.: Okay. We'll have to look  
31 at the hard copy, Mr. Brickhill, and the question ... I'm  
32 sorry. Do you have that?

33 MR. BRICKHILL: I have it in front of me.

34 MS. HENLEY ANDREWS, Q.C.: The question that you  
35 were asked with respect to the Newfoundland Power  
36 generation credit is whether it is reflected in the difference  
37 between columns 2 and 6, and your answer to the question  
38 was yes. Is that correct?

39 MR. BRICKHILL: I don't recall.

40 MS. HENLEY ANDREWS, Q.C.: No. Was your answer  
41 correct in terms of yes?

42 MR. BRICKHILL: What was the question again?

43 MS. HENLEY ANDREWS, Q.C.: If you look at column 2 ...  
44 well, let me just read out from ...

45 COMMISSIONER SAUNDERS: Excuse me, Ms. Henley  
46 Andrews, what page are you on?

47 MS. HENLEY ANDREWS, Q.C.: I'm on page 3 of 94 of **IC-**  
48 **251(c)**. Mr. O'Rielly, you don't have to go to this reference,  
49 but the transcript at page 37, that's the hard copy of it from  
50 yesterday, says "I am asking the witness whether the  
51 generation credit, which he described in terms of  
52 megawatts, is reflected in terms of dollars in the difference  
53 between the two columns 2 and 6 at line 1." And your  
54 answer, Mr. Brickhill, was, "I believe so, yes." And I'd like  
55 you to take a look at column 2, line 1. Do you have that?

56 MR. BRICKHILL: Okay. I am looking at Schedule 1.21 of  
57 6, which is where we were looking when I got asked that  
58 question.

59 MS. HENLEY ANDREWS, Q.C.: That's correct, and column  
60 2 is the revenues?

61 MR. BRICKHILL: That's correct.

62 MS. HENLEY ANDREWS, Q.C.: Including the revenues ...  
63 and line 1 is the revenues from Newfoundland Power?

64 MR. BRICKHILL: That's correct.

65 MS. HENLEY ANDREWS, Q.C.: And column 6 is the  
66 revenue requirement after deficit and revenue credit  
67 allocation, correct?

68 MR. BRICKHILL: Correct.

69 MS. HENLEY ANDREWS, Q.C.: Is the difference between  
70 those two the NP generation credit?

71 MR. BRICKHILL: I calculated the value at \$1.3 million,  
72 which is the difference between these two numbers, so I  
73 said yes yesterday because it comported with what I had  
74 separately calculated at, I think it was \$1.3 million.

75 MS. HENLEY ANDREWS, Q.C.: Okay, but if we were to  
76 look for the NP, the dollar value of the NP generation credit,  
77 this would not necessarily be the place to look, would you  
78 agree?

79 MR. BRICKHILL: I agree.

80 MS. HENLEY ANDREWS, Q.C.: And that it's more good  
81 luck than good management that you came up with the  
82 answer, yes, yesterday?

83 MR. BRICKHILL: Yes.

84 MS. HENLEY ANDREWS, Q.C.: So how would you  
85 calculate the NP generation credit?

86 MR. BRICKHILL: I would calculate the costs allocated to  
87 Newfoundland Power with, then without it.

88 MS. HENLEY ANDREWS, Q.C.: So you would basically  
89 run two cost of service studies?

- 1 MR. BRICKHILL: That is correct.
- 2 MS. HENLEY ANDREWS, Q.C.: And in the first cost of  
3 service study you would use NP's actual demand?
- 4 MR. BRICKHILL: Yes.
- 5 MS. HENLEY ANDREWS, Q.C.: And in the second cost of  
6 service study you would use their demand after the credit  
7 had been applied?
- 8 MR. BRICKHILL: That's correct.
- 9 MS. HENLEY ANDREWS, Q.C.: And the dollar difference  
10 at the end would be the dollar value?
- 11 MR. BRICKHILL: That's correct.
- 12 MS. HENLEY ANDREWS, Q.C.: I presume that you're  
13 aware that this hearing represents the first time that the  
14 rates for the industrial customers have been set by the  
15 Board?
- 16 MR. BRICKHILL: That's my understanding.
- 17 MS. HENLEY ANDREWS, Q.C.: And that, therefore, in  
18 previous hearings with respect to rates they have focused  
19 on Newfoundland Power and what was appropriate for  
20 Newfoundland Power without necessarily any regard for  
21 the impact on industrial customers?
- 22 MR. BRICKHILL: That makes sense, but I can't say what  
23 was in the mind of the Board.
- 24 MS. HENLEY ANDREWS, Q.C.: Okay. The witnesses from  
25 Hydro who have testified, Mr. Budgell being one of them,  
26 have indicated that the service provided by Newfoundland  
27 Power's generation availability is basically the same as the  
28 service provided by Abitibi in Stephenville through the  
29 interruptible B contract. Would you agree with that?
- 30 MR. BRICKHILL: Could you repeat the question, please?
- 31 MS. HENLEY ANDREWS, Q.C.: That when you look at the  
32 curtailable power available from Abitibi in Stephenville,  
33 which is 46 megawatts, and you look at the generation  
34 plant available for peaking capacity from Newfoundland  
35 Power, that the type of service, now the amount may be  
36 different, but the type of service that's being provided by  
37 each of them is basically the same?
- 38 MR. BRICKHILL: I would say they're similar but not the  
39 same.
- 40 MS. HENLEY ANDREWS, Q.C.: They do, however,  
41 provide peak shaving?
- 42 MR. BRICKHILL: They both can provide peak shaving,  
43 but in addition, Newfoundland Power can provide power  
44 off peak at any time of the year which the curtailable B  
45 schedule is limited to I think it's the four winter months and  
46 some number, I think it's ten, but some limited number of  
47 interruptions and for limited periods of time and there are  
48 no such restrictions on Newfoundland Power's generation.
- 49 MS. HENLEY ANDREWS, Q.C.: When it comes to  
50 Newfoundland Power's generation credit, however, the  
51 generation credit is premised on peaking capacity, correct,  
52 not on energy?
- 53 MR. BRICKHILL: It is premised on capacity, yes, and that  
54 capacity is available year round and not in the case of a  
55 unit being down or an emergency situation that could  
56 occur any time during the year.
- 57 MS. HENLEY ANDREWS, Q.C.: However, while the  
58 current interruptible B or curtailable contract with Abitibi  
59 specifically references the winter months, it could possibly  
60 be negotiated on a year round basis, wouldn't you agree?
- 61 MR. BRICKHILL: It could be, but it hasn't been.
- 62 MS. HENLEY ANDREWS, Q.C.: Okay, but you don't know  
63 whether that's because Hydro was only interested in four  
64 months or whether Abitibi was only interested in four  
65 months, correct?
- 66 MR. BRICKHILL: No, I don't, no.
- 67 MS. HENLEY ANDREWS, Q.C.: And the four months or  
68 the five months that it covers in a year are the ones in  
69 which the peak historically have always occurred?
- 70 MR. BRICKHILL: That's correct.
- 71 MS. HENLEY ANDREWS, Q.C.: And similarly, when it  
72 comes to meeting peak requirements, although the  
73 Newfoundland Power generation is available year round, it  
74 would only be needed for peaking requirements in those  
75 same months?
- 76 MR. BRICKHILL: That is not my understanding of its  
77 utilization. It's my understanding Hydro has on occasion  
78 asked for generation in the summer.
- 79 MS. HENLEY ANDREWS, Q.C.: But are you aware that  
80 other industrial customers can also be asked to reduce their  
81 load during emergencies?
- 82 MR. BRICKHILL: Yes, they can.
- 83 MS. HENLEY ANDREWS, Q.C.: Which is the other side of  
84 the coin? In other words, Hydro has a particular demand to  
85 meet and it can meet it one of two ways, by additional  
86 generation or by reduction in use?
- 87 MR. BRICKHILL: It depends on the extent of the need.  
88 Interruptible only gets you so far and there's no assurance,  
89 and this is another distinction between the two, there's no  
90 assurance that there's any interruptible being sold to take  
91 back while you know those plants of Newfoundland Power  
92 are there. They don't disappear overnight.

1 MS. HENLEY ANDREWS, Q.C.: And I agree that there are  
2 differences, but let's ... you would also have to agree that  
3 the pricing of the interruptible B Abitibi contract is readily  
4 apparent, or the cost of it is readily apparent, as we  
5 discussed from the cost of service study, because it's  
6 actually shown as a line item, whereas it is virtually  
7 impossible for anyone looking at that study to determine  
8 how much Hydro is paying for the NP generation credit,  
9 correct?

10 MR. BRICKHILL: That's correct.

11 MS. HENLEY ANDREWS, Q.C.: And therefore, it is  
12 virtually impossible for the industrial customers, as an  
13 example, looking at the cost of service study, to determine  
14 how much they are paying towards the NP generation  
15 credit?

16 MR. BRICKHILL: That's correct.

17 MS. HENLEY ANDREWS, Q.C.: So each set of customers  
18 or each customer, Abitibi in Stephenville and  
19 Newfoundland Power, is compensated on a different basis  
20 for making load available to meet peak?

21 MR. BRICKHILL: That's correct.

22 MS. HENLEY ANDREWS, Q.C.: Do you agree that the NP  
23 generation credit results in a ... or the application of the NP  
24 generation credit results in a load factor for Newfoundland  
25 Power which is different than Hydro's load factor for  
26 planning purposes?

27 MR. BRICKHILL: I would have to check with Hubert.

28 MS. HENLEY ANDREWS, Q.C.: Okay. If Mr. Budgell  
29 agreed with me on that then you wouldn't have any reason  
30 to disagree with him?

31 MR. BRICKHILL: That's correct.

32 *(12:15 p.m.)*

33 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
34 that treatment of Newfoundland Power results in lower cost  
35 allocation to Newfoundland Power for generation and  
36 transmission demand?

37 MR. BRICKHILL: I know the answer is yes on generation.  
38 I would have to check on transmission.

39 MS. HENLEY ANDREWS, Q.C.: And that these costs or a  
40 portion of these costs would go to the industrial  
41 customers?

42 MR. BRICKHILL: That's correct.

43 MS. HENLEY ANDREWS, Q.C.: Do you agree that Hydro  
44 uses a CP of generation for Newfoundland Power that it net  
45 of the generation demand Newfoundland Power can  
46 provide at peak?

47 MR. BRICKHILL: Correct.

48 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
49 this reduces Newfoundland Power's net system CP  
50 contribution?

51 MR. BRICKHILL: Yes, it does.

52 MS. HENLEY ANDREWS, Q.C.: But that it does not  
53 normally reduce Newfoundland Power's CP at the meter?

54 MR. BRICKHILL: It could reduce the CP at the meter.

55 MS. HENLEY ANDREWS, Q.C.: If, in fact, their generation  
56 was being used at the time of the coincident peak?

57 MR. BRICKHILL: That's correct.

58 MS. HENLEY ANDREWS, Q.C.: But, if their generation is  
59 not being used at the time of system peak it does not  
60 reduce their CP at their meter? In other words, they are  
61 consuming that demand?

62 MR. BRICKHILL: That's correct.

63 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
64 the industrial customer coincident peak is not adjusted by  
65 any amount, although the 46 megawatts of interruptible B  
66 demand serves a similar purpose?

67 MR. BRICKHILL: That is correct and not correct,  
68 depending on how you view credit. If you say credit  
69 means money paid, which is not an unreasonable  
70 definition, then the credit is in the form of Canadian dollars  
71 to the interruptible B, and in the case of Newfoundland  
72 Power the credit is a reduction in the cost allocated to them  
73 in a rate case.

74 MS. HENLEY ANDREWS, Q.C.: And if you use it in the  
75 other context, which is the actual peak, you would have to  
76 agree that the industrial coincident peak is not adjusted?

77 MR. BRICKHILL: I would agree that the industrial  
78 coincident peak is not adjusted.

79 MS. HENLEY ANDREWS, Q.C.: So would you agree that  
80 generally Newfoundland Power's contribution to system  
81 peak is actually higher than the value used in the cost of  
82 service study?

83 MR. BRICKHILL: Yes, I agree with that.

84 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
85 the whole idea of the coincident peak methodology is that  
86 it's designed to capture the relative contribution of  
87 customer loads to system peak?

88 MR. BRICKHILL: That's correct.

89 MS. HENLEY ANDREWS, Q.C.: And that when you adjust  
90 the NP peak for generation capacity then your cost of  
91 service study does not capture the relative contribution to

- 1 system peak?
- 2 MR. BRICKHILL: It may not in the case of Newfoundland  
3 Power.
- 4 MS. HENLEY ANDREWS, Q.C.: If you ... could we go to  
5 Mr. Osler's testimony at page 18? It's a supplementary.  
6 Towards the bottom of the page. Is it that one or the  
7 second supplementary? Sometimes the page numbering  
8 gets ... Mr. Osler has estimated that the impact of these  
9 adjustments to peak is in the range of \$540,000 for the  
10 industrial customers or in excess of \$540,000 for the  
11 industrial customers. You can see that there at the bottom  
12 of page 18? You agree that that's what it says?
- 13 MR. BRICKHILL: I agree that's what it says.
- 14 MS. HENLEY ANDREWS, Q.C.: Have you done any  
15 analysis to determine what the impact of the NP generation  
16 credit, as a reduction in demand, has for the industrial  
17 customers on their allocated cost of service?
- 18 MR. BRICKHILL: No, I haven't.
- 19 MS. HENLEY ANDREWS, Q.C.: Would you agree that ...  
20 I mean, I think we both agree that Newfoundland Power  
21 should receive some form of a credit for the generation  
22 capacity which it makes available to the system, correct?
- 23 MR. BRICKHILL: Correct.
- 24 MS. HENLEY ANDREWS, Q.C.: Would you also agree  
25 that that can be done in a number of different ways?
- 26 MR. BRICKHILL: Yes.
- 27 MS. HENLEY ANDREWS, Q.C.: And that one of the ways  
28 that could be utilized is to develop a compensation package  
29 similar to the compensation package used by Hydro for  
30 Abitibi in Stephenville for its curtailable power?
- 31 MR. BRICKHILL: I can't imagine Newfoundland Power  
32 would want to get interruptible service. They've never  
33 asked for it.
- 34 MS. HENLEY ANDREWS, Q.C.: No, I didn't, I didn't  
35 suggest interruptible. I said that in designing an amount ...  
36 in coming up with an amount of compensation for the  
37 availability of that capacity it is possible to develop a dollar  
38 credit that reasonably reflects that capacity?
- 39 MR. BRICKHILL: That is correct.
- 40 MS. HENLEY ANDREWS, Q.C.: And in those  
41 circumstances the amount of the credit would be readily  
42 apparent from the cost of service study? In other words, it  
43 would be shown in the same manner that the credit to  
44 Abitibi in Stephenville is shown?
- 45 MR. BRICKHILL: Yes, the format could be changed to  
46 show that.
- 47 MS. HENLEY ANDREWS, Q.C.: And it could be done  
48 without impacting the coincident peak for the purpose of  
49 the cost of service study?
- 50 MR. BRICKHILL: That is correct.
- 51 MS. HENLEY ANDREWS, Q.C.: Do you agree that the  
52 Newfoundland Power generation credit is also reflected in  
53 Hydro's calculation of system load factor?
- 54 MR. BRICKHILL: That is correct.
- 55 MS. HENLEY ANDREWS, Q.C.: I'd like to go to page 20 of  
56 Mr. Osler's testimony, and you can see, at line 5, Mr.  
57 Osler's calculation that the impact of adjusting the load  
58 factor for the NP generation credit is an increase in the  
59 allocation of cost to the industrial customers of  
60 approximately \$300,000? Do you see that there on the  
61 page?
- 62 MR. BRICKHILL: I see that there.
- 63 MS. HENLEY ANDREWS, Q.C.: Have you done any  
64 analysis of that cost impact?
- 65 MR. BRICKHILL: No, I haven't.
- 66 MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, this is a  
67 good place to break.
- 68 MR. NOSEWORTHY, CHAIRMAN: Thank you, very  
69 much, Ms. Henley Andrews. Thank you, Mr. Brickhill.  
70 We'll break until 2:00.
- 71 *(break)*
- 72 *(2:00 p.m.)*
- 73 MR. NOSEWORTHY, CHAIRMAN: Good afternoon, any  
74 preliminary matters, I guess, Ms. Greene?
- 75 MS. GREENE, Q.C.: Good afternoon. During the break, the  
76 list of undertakings from yesterday was circulated. You will  
77 see from this list that there were three undertakings  
78 provided yesterday. The first two were arising from  
79 questions of Commissioner Powell, and we believe we  
80 answered both questions when I asked Mr. Osmond  
81 questions arising, but you will see that I've also noted the  
82 reference in yesterday's transcript where we believe we  
83 answered the questions. The third undertaking was  
84 provided to the Consumer Advocate, and it is to file the  
85 2001 customer satisfaction survey when it is complete, and  
86 we will do that when it is available. Thank you.
- 87 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.  
88 Greene. Any other preliminary matters, Mr. Kennedy?
- 89 MR. KENNEDY: I don't believe so, Chair.
- 90 MR. NOSEWORTHY, CHAIRMAN: Okay, thank you. Ms.  
91 Henley Andrews, when you're ready please. Good  
92 afternoon.

- 1 MS. HENLEY ANDREWS, Q.C.: Thank you, Mr. Chairman.  
2 There is one preliminary matter, and that is that we have  
3 circulated to counsel, and I believe filed electronically,  
4 some supplemental evidence from Mr. Osler on the RSP  
5 arising out of the answers to information requests that  
6 have been received over the last number of weeks, so I  
7 simply want to note that and to file the copies.
- 8 MR. NOSEWORTHY, CHAIRMAN: Thank you.
- 9 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, I presume  
10 that you're aware that Hydro proposes that the  
11 transmission which solely connects remote generation to  
12 the grid will be dealt with on the same demand energy basis  
13 as the generation which it interconnects?
- 14 MR. BRICKHILL: Yes, I'm aware of that.
- 15 MS. HENLEY ANDREWS, Q.C.: And that grid  
16 transmission plant is allocated entirely to demand, or  
17 classified as 100 percent demand.
- 18 MR. BRICKHILL: That's correct.
- 19 MS. HENLEY ANDREWS, Q.C.: And do you agree that  
20 Hydro's proposal in that regard is consistent with the  
21 Board's 1993 cost of service methodology  
22 recommendation?
- 23 MR. BRICKHILL: Yes.
- 24 MS. HENLEY ANDREWS, Q.C.: And do you agree that  
25 that particular recommendation of the Board was not an  
26 interim recommendation?
- 27 MR. BRICKHILL: That's correct.
- 28 MS. HENLEY ANDREWS, Q.C.: And Dr. Wilson suggests  
29 at page 12 of his testimony that some transmission plant  
30 should be classified as energy related?
- 31 MR. BRICKHILL: Yes, I'm aware of that.
- 32 MS. HENLEY ANDREWS, Q.C.: And this is not consistent  
33 with the methodology approved by the Board in 1993,  
34 correct?
- 35 MR. BRICKHILL: Not entirely because the transmission  
36 connecting generation to the grid is classified partially as  
37 energy. Hydro has classified some transmission on an  
38 energy basis.
- 39 MS. HENLEY ANDREWS, Q.C.: The, in terms of Dr.  
40 Wilson's evidence, however, he is proposing a change with  
41 respect to some transmission plant. I'd like you to take a  
42 look at page 12 of his testimony. My understanding from  
43 his testimony was that he was proposing that some  
44 transmission which is currently classified as 100 percent  
45 demand under the 1993 cost of service methodology is  
46 proposed to be treated as partly demand and partly energy  
47 related.
- 48 MR. BRICKHILL: I don't find that in the testimony in front  
49 of me.
- 50 MS. HENLEY ANDREWS, Q.C.: That's right in front of  
51 you, I agree. Just one second, I'll have to get my hard  
52 copy. Could we scroll down a little bit, Mr. O'Rielly, keep  
53 going, and yes, okay, the paragraph that is in front of you,  
54 Mr. Brickhill, there. It says when a plant serves both base  
55 load and peak needs. Do you agree that that's a change?  
56 Up above, there's a reference up above in the sentence, "In  
57 that case the capital cost of storage capacity is virtually all  
58 energy related".
- 59 MR. BRICKHILL: Yes, I see that sentence. That doesn't  
60 say to me that Dr. Wilson is recommending that some  
61 transmission previously entirely classified as energy ... I  
62 mean as demand be classified as energy.
- 63 MS. HENLEY ANDREWS, Q.C.: Would you agree that the,  
64 that allocating costs more to energy than to demand would  
65 disadvantage the industrial customers?
- 66 MR. BRICKHILL: Yes, it would.
- 67 MS. HENLEY ANDREWS, Q.C.: Are you familiar with the,  
68 what the ... the acronym, I guess, is NUGS ... the non-utility  
69 generation, which Hydro purchases energy from in the  
70 province?
- 71 MR. BRICKHILL: Somewhat, yes.
- 72 MS. HENLEY ANDREWS, Q.C.: Are you aware that those  
73 were not in service at the time of the 1993 hearing?
- 74 MR. BRICKHILL: That's correct.
- 75 MS. HENLEY ANDREWS, Q.C.: It's my understanding of  
76 Dr. Wilson's evidence, that he says that the treatment of  
77 Hydro's generation from NUGS is inconsistent, vis-a-vis, its  
78 treatment of purchases from Abitibi Consolidated in Grand  
79 Falls, and from Corner Brook Pulp and Paper. Do you agree  
80 with that statement?
- 81 MR. BRICKHILL: Yes.
- 82 MS. HENLEY ANDREWS, Q.C.: And could you outline the  
83 effect of any inconsistency on both Newfoundland Power  
84 and the industrial customers?
- 85 MR. BRICKHILL: The NUGS are treated the same as other  
86 hydraulic generation, that is they are classified by system  
87 load factor. The purchases from the industrials, if I recall  
88 correctly, was on an as-billed basis. It was flowed the same  
89 manner as if it was a bill.
- 90 MS. HENLEY ANDREWS, Q.C.: However, in the case of  
91 the purchases from the industrial customers, they only pay  
92 in the event that Hydro doesn't have to spill water, correct?
- 93 MR. BRICKHILL: That's correct.

- 1 MS. HENLEY ANDREWS, Q.C.: Which is different from its  
2 purchases from the NUGS.
- 3 MR. BRICKHILL: That's correct.
- 4 MS. HENLEY ANDREWS, Q.C.: Mr. Osler has indicated in  
5 his testimony that there should probably be a demand and  
6 an energy component for most of those purchases. Do you  
7 have a position on this?
- 8 MR. BRICKHILL: Not at the present time. I have forgotten  
9 whatever I knew about the purchases from the industrials.
- 10 MS. HENLEY ANDREWS, Q.C.: Okay, I want to move on  
11 to the rate design issue. I take it from your testimony that  
12 you are recommending an energy only rate for  
13 Newfoundland Power.
- 14 MR. BRICKHILL: That's correct.
- 15 MS. HENLEY ANDREWS, Q.C.: Did Newfoundland and  
16 Labrador Hydro seek your input on whether there should  
17 be an energy only rate for Newfoundland Power?
- 18 MR. BRICKHILL: Yes.
- 19 MS. HENLEY ANDREWS, Q.C.: And what is your opinion  
20 on the effect of an energy only rate?
- 21 MR. BRICKHILL: I don't believe that the energy only rate  
22 has any detrimental effects to other customers or to Hydro  
23 or to the public at large.
- 24 MS. HENLEY ANDREWS, Q.C.: Does it send the  
25 appropriate pricing signals?
- 26 MR. BRICKHILL: I think it sends adequate pricing signals.
- 27 MS. HENLEY ANDREWS, Q.C.: Does it properly reflect  
28 cost causation?
- 29 MR. BRICKHILL: Yes, insofar as the total costs which are  
30 saved by Newfoundland Power in its energy only rate.
- 31 MS. HENLEY ANDREWS, Q.C.: Would you agree that as  
32 a result of the use of an energy only rate, Newfoundland  
33 Power does not have the same incentive as the industrial  
34 customers to accurately forecast its demand?
- 35 MR. BRICKHILL: It may not have the same incentive.  
36 Incentives may be different, but I think it has incentives to  
37 accurately forecast its demand.
- 38 MS. HENLEY ANDREWS, Q.C.: And what are those  
39 incentives?
- 40 MR. BRICKHILL: If they understate their demand  
41 purposely, Hydro might not have the capacity that they  
42 need. They are highly dependent on Hydro.
- 43 MS. HENLEY ANDREWS, Q.C.: That would really only be  
44 a factor, however, if the system were capacity constrained  
45 at the time that they were doing their forecast, wouldn't you  
46 agree?
- 47 MR. BRICKHILL: No. Hydro might react in such a way,  
48 since we are talking about a hypothetical, for example,  
49 scheduling maintenance when Newfoundland Power  
50 needed that unit to be online.
- 51 MS. HENLEY ANDREWS, Q.C.: Yes, but when you're  
52 dealing with an energy only rate, and you are dealing as we  
53 are today with a forecast cost of service, you would agree  
54 I believe that the peak that Newfoundland Power forecasts  
55 for itself as well as its energy use, will have an impact on  
56 the amount of cost that's allocated to it in the rates on a go  
57 forward basis.
- 58 MR. BRICKHILL: That's correct.
- 59 MS. HENLEY ANDREWS, Q.C.: And if Newfoundland  
60 Power understates its demand requirement and overstates  
61 its energy requirement, it will be allocated less cost.
- 62 MR. BRICKHILL: That's correct.
- 63 *(2:15 p.m.)*
- 64 MS. HENLEY ANDREWS, Q.C.: And the industrial  
65 customers have to have contracts, or proposed contracts  
66 which incorporate the concept of power on order, correct?
- 67 MR. BRICKHILL: That's correct.
- 68 MS. HENLEY ANDREWS, Q.C.: So by October 1st of each  
69 year, the industrial customers effectively lock in as to what  
70 their demand is going to be in the following calendar year?
- 71 MR. BRICKHILL: That's correct.
- 72 MS. HENLEY ANDREWS, Q.C.: And if they exceed that  
73 demand, then they have two potential problems. They  
74 have access to interruptible power but they're not  
75 guaranteed it, correct?
- 76 MR. BRICKHILL: Correct.
- 77 MS. HENLEY ANDREWS, Q.C.: Because Hydro can say  
78 sorry, it's not available, correct?
- 79 MR. BRICKHILL: Correct.
- 80 MS. HENLEY ANDREWS, Q.C.: And they may have to  
81 pay a premium for that power because they have exceeded  
82 their forecast demand, correct?
- 83 MR. BRICKHILL: Correct.
- 84 MS. HENLEY ANDREWS, Q.C.: But Newfoundland Power  
85 does not have any such disincentive.
- 86 MR. BRICKHILL: That's correct.
- 87 MS. HENLEY ANDREWS, Q.C.: Ms. Butler asked you  
88 some questions yesterday on behalf of Newfoundland  
89 Power with respect to whether its rate covered its costs and

- 1 you indicated that it does, correct?
- 2 MR. BRICKHILL: Correct.
- 3 MS. HENLEY ANDREWS, Q.C.: So the issue is not with  
4 respect to whether the overall rate charged recovers its  
5 allocated portion of cost, but it is a question of whether its  
6 rate structure promotes efficiency and fairness, wouldn't  
7 you agree?
- 8 MR. BRICKHILL: I agree.
- 9 MS. HENLEY ANDREWS, Q.C.: Now would you agree that  
10 the reason that the Newfoundland Power energy rate is far  
11 in excess of its embedded energy costs is because that rate  
12 includes both demand costs and specifically assigned  
13 costs.
- 14 MR. BRICKHILL: That's correct.
- 15 MS. HENLEY ANDREWS, Q.C.: So it is not, in fact, an  
16 energy rate in the purest sense.
- 17 MR. BRICKHILL: In the vernacular, it's an energy rate, but  
18 it includes substantially more than energy costs.
- 19 MS. HENLEY ANDREWS, Q.C.: Could we look at **PUB-68**,  
20 and I don't know if the letter is on the ... have you seen this  
21 letter from Newfoundland Power to Newfoundland Hydro  
22 on the rate structure?
- 23 MR. BRICKHILL: Yes, I have.
- 24 MS. HENLEY ANDREWS, Q.C.: Okay, and if we could  
25 scroll down a little please. You see in the last paragraph  
26 here on the first page that it indicates that, "As our two  
27 organizations have concluded during previous attempts to  
28 address the issue, a demand energy rate would have a  
29 tendency to create volatility in the earnings of both Hydro  
30 and Newfoundland Power from year to year". As I  
31 understood your testimony yesterday, your belief is that it  
32 might create volatility in the earnings of Newfoundland  
33 Power, but that it would not create volatility in the earnings  
34 of Hydro, would you agree?
- 35 MR. BRICKHILL: That's correct.
- 36 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
37 there is already revenue variability for Hydro with the NP  
38 energy only rate?
- 39 MR. BRICKHILL: Yes.
- 40 MS. HENLEY ANDREWS, Q.C.: Because in cold winters  
41 the energy use of Newfoundland Power goes up and  
42 there's more energy sold, and therefore the amount of fixed  
43 demand related and specifically assigned costs goes up,  
44 and in warm winters the converse or contrary occurs?
- 45 MR. BRICKHILL: That's correct.
- 46 MS. HENLEY ANDREWS, Q.C.: Do you agree that demand  
47 costs are fixed costs?
- 48 MR. BRICKHILL: Yes.
- 49 MS. HENLEY ANDREWS, Q.C.: That a system, the  
50 generating system, and the transmission system was built  
51 to meet forecast demand whether or not it materializes,  
52 correct?
- 53 MR. BRICKHILL: That's correct.
- 54 MS. HENLEY ANDREWS, Q.C.: Do you agree that if  
55 Newfoundland Power's, if the rate structure for  
56 Newfoundland Power were a three part, or a two part rate  
57 with a demand and energy component in a two part rate  
58 scenario, or a demand energy and specifically assigned  
59 component, that the energy portion of the rate would be  
60 much lower than its current rate.
- 61 MR. BRICKHILL: That's correct.
- 62 MS. HENLEY ANDREWS, Q.C.: And in fact what you  
63 would see would be a rate structure very similar to the rate  
64 structure for the industrial customers, although the  
65 amounts for each component might be different?
- 66 MR. BRICKHILL: That's correct.
- 67 MS. HENLEY ANDREWS, Q.C.: Do you agree that a  
68 demand and energy rate structure provides greater  
69 incentive for demand side management?
- 70 MR. BRICKHILL: I'm not sure that that is the case,  
71 certainly for a wholesale transaction.
- 72 MS. HENLEY ANDREWS, Q.C.: One of the witnesses, or  
73 several of the witnesses who appeared before us on our  
74 public participation days were from the Conservation  
75 Corps, and from the Federal Department of Natural  
76 Resources, I think it's called, and they indicated that there  
77 are a great many initiatives that are possible that might  
78 cause even residential consumers to help reduce peak, and  
79 some of them are pretty basic, which is, you know, lowering  
80 the temperature on your hot water boiler and those types  
81 of things, and others relate to the type of heating system  
82 that people use. If Newfoundland Power had a demand  
83 energy rate structure similar to that which is used for the  
84 industrial customers, although you, obviously given its  
85 variability in peak, and I'll get to that, and you might not  
86 have it on an annual peak basis, it could be seasonal, they  
87 would have incentive to not exceed their demand, wouldn't  
88 you agree? If they had to pay a premium above for excess  
89 demand.
- 90 MR. BRICKHILL: I agree with that.
- 91 MS. HENLEY ANDREWS, Q.C.: And similarly, on that  
92 type of a rate structure, if Newfoundland Power could  
93 convince its customers to reduce their demand, then it  
94 could save costs, correct?



1 MR. BRICKHILL: No, that would be detrimental to  
2 Newfoundland Power. In other words, with a demand  
3 charge, some of their costs would be fixed, and assuming  
4 they were contracted on an order for an extended period of  
5 time, if they were successful in achieving peak reductions  
6 through its customers, they'd have nobody to pay for some  
7 of those demand charges. There's a perverse incentive here  
8 with a demand charge simply because it is a wholesaler  
9 rather than an end use customer.

10 MS. HENLEY ANDREWS, Q.C.: Let me re-word my  
11 question because I don't think I phrased it for you to  
12 understand it the way I intended it, and that is that a  
13 successful demand side management initiative does shave  
14 peak over time, wouldn't you agree?

15 MR. BRICKHILL: If it's successful, yes, and it could also  
16 be successful shaving energy over time and not  
17 necessarily peak.

18 MS. HENLEY ANDREWS, Q.C.: Exactly, and controlling  
19 peak has an impact on adding on the need to add to  
20 generation to the system, wouldn't you agree?

21 MR. BRICKHILL: I agree.

22 MS. HENLEY ANDREWS, Q.C.: And if a demand side, if a  
23 successful demand side management program were  
24 initiatives, there could be benefits to all of Hydro's  
25 customers from the deferral of cost of the next round of  
26 generation, agreed?

27 MR. BRICKHILL: Agreed.

28 MS. HENLEY ANDREWS, Q.C.: But the present rate  
29 structure for Newfoundland Power actually gives a benefit  
30 to Newfoundland Power to sell as much energy as possible  
31 on its bottom line, would you agree?

32 MR. BRICKHILL: Yes.

33 MS. HENLEY ANDREWS, Q.C.: Are you aware that Dr.  
34 Surekai from Foster and Associates, at the time of both the  
35 1990 and 1992 rate hearings, recommended a three part rate  
36 for Newfoundland Power?

37 MR. BRICKHILL: No, I was unaware of that.

38 MS. HENLEY ANDREWS, Q.C.: I have an extract from his  
39 evidence that I would like to go through with you.

40 MR. KENNEDY: That would be IC-2, Chair.

41 **EXHIBIT IC-2 ENTERED**

42 (2:30 p.m.)

43 MS. HENLEY ANDREWS, Q.C.: And Mr. Chairman, for the  
44 record, as it's not actually marked on the document, this is  
45 an extract from the pre-filed evidence of Dr. Surekai in the  
46 1992 rate referral. You can see, Mr. Brickhill, at the bottom

47 of page 14, line 16 and 17, that the question which was  
48 posed was have you investigated options with respect to  
49 the existing energy only rate form for Newfoundland Power,  
50 correct?

51 MR. BRICKHILL: Correct.

52 MS. HENLEY ANDREWS, Q.C.: And you'll see a reference  
53 in the answer to Dr. Surekai, indicating that he has  
54 investigated various options in response to the Board's  
55 recommendation in its 1990 report that Hydro at its next rate  
56 hearing present whatever information it may have with  
57 regard to a rate with a demand charge component for  
58 discussion and determination of a date for filing a rate  
59 proposal. The evidence then goes on to deal with the  
60 options for a rate design for Newfoundland Power, and  
61 when you look at page 15, would you agree that the  
62 options that are outlined ... one, which is a continued use  
63 of an existing energy only rate. Two, which is a three part  
64 rate with a cost based customer charge and energy charge  
65 set at marginal energy cost and a flat demand charge. The  
66 third, which is a variation of the second one, with a demand  
67 charge for demand in excess of forecast billing demand, and  
68 the use of ... the fourth, being the use of a three part rate  
69 consisting of cost based customer charge, etcetera, that  
70 those are in fact reasonable options for the design of a rate  
71 for Newfoundland Power.

72 MR. BRICKHILL: I'm sorry, I didn't hear the question.

73 MS. HENLEY ANDREWS, Q.C.: Having ... and you can  
74 take your time to take a look at it as I realize that you are  
75 not familiar with the text, but would you agree that the four  
76 options that are outlined by Dr. Surekai represent  
77 effectively the options that are available for a rate design  
78 for Newfoundland Power?

79 MR. BRICKHILL: I think there's one other option.

80 MS. HENLEY ANDREWS, Q.C.: And what would that be?

81 MR. BRICKHILL: That would be an embedded cost based  
82 demand rate and an energy charge calculated in the same  
83 manner as is currently calculated for the industrials.

84 MS. HENLEY ANDREWS, Q.C.: Now you noted at line 20  
85 that, on page 15, that Dr. Surekai recommends that option  
86 two, which is the three part rate, with the flat demand rate  
87 be used initially to gain experience, he says, in its  
88 application and provide a suitable transition period. This  
89 is contrary to your recommendation today, correct?

90 MR. BRICKHILL: That's correct, and I don't think it's  
91 consistent with anybody's rate recommendation in this  
92 particular case. He's got an energy charge set at the level  
93 of marginal energy cost.

94 MS. HENLEY ANDREWS, Q.C.: Which presumably is  
95 short-term marginal, short-run marginal cost, rather than

1 long-run marginal cost, would you agree?  
2 MR. BRICKHILL: Yes.  
3 MS. HENLEY ANDREWS, Q.C.: And would it surprise you  
4 that at both the 1990 and 1992 hearings, Newfoundland  
5 Power was also proposing a three part rate?  
6 MR. BRICKHILL: For itself?  
7 MS. HENLEY ANDREWS, Q.C.: For itself.  
8 MR. BRICKHILL: I find it interesting but not necessarily  
9 surprising.  
10 MS. HENLEY ANDREWS, Q.C.: But it was not something  
11 that you were previously aware?  
12 MR. BRICKHILL: No.  
13 MS. HENLEY ANDREWS, Q.C.: As I mentioned, when you  
14 look at lines 18 through 22 on page 14, there is a reference  
15 to Hydro providing a report at its next rate hearing, do you  
16 see that?  
17 MR. BRICKHILL: Yes, I see that.  
18 MS. HENLEY ANDREWS, Q.C.: I have an extract from a  
19 report called "Costing Methodologies and Rate Design  
20 Study", prepared for Newfoundland and Labrador Hydro  
21 by Foster Associates, dated May 1991. Have you reviewed  
22 that study?  
23 MR. BRICKHILL: Not in some time, but I have seen that  
24 study.  
25 MS. HENLEY ANDREWS, Q.C.: Okay, Mr. Chairman, this  
26 document had been entered as Consent 16 in the January  
27 1992 Hydro rate hearing, could I have it marked?  
28 MR. KENNEDY: I believe we'll call it IC-3, counsel.  
29 MS. HENLEY ANDREWS, Q.C.: Thank you.  
30 **EXHIBIT IC-3 ENTERED**  
31 MS. HENLEY ANDREWS, Q.C.: And Mr. Brickhill, I would  
32 first like to refer you to page 51 of the report and which is  
33 the section on rate design, and in the section at the top  
34 called "general", would you read out the fourth sentence  
35 that begins, "The objectives of rate design"?  
36 MR. BRICKHILL: The objectives of rate design include at  
37 least the following; meeting the annual revenue  
38 requirement; equity or fairness; economic efficiency;  
39 simplicity; and administrative ease; stability and  
40 gradualism; conservation of resources; social goals;  
41 employment; and protection of the environment.  
42 MS. HENLEY ANDREWS, Q.C.: Do you agree that those  
43 are the objectives of rate design?  
44 MR. BRICKHILL: Yes.

45 MS. HENLEY ANDREWS, Q.C.: And I'd like to, if you take  
46 a look at the next section, it says on the same page, "This  
47 chapter also provides a discussion of the recommended  
48 changes in rate design within the various rate classes, and  
49 with regard to the consolidation of certain of the existing  
50 rate classes". And it says, "These recommended changes  
51 include the following", and then I'd like you to look over to  
52 page 52 and read out recommendations three, four and five.  
53 MR. BRICKHILL: Three, the use of a three part customer  
54 demand energy rate form for NLP which gives weight to  
55 marginal cost in terms of structure. Unit customer demand  
56 and energy cost will be scaled on an equal proportional  
57 basis to unit prices that meet the class annual revenue  
58 requirement. Four, modification of industrial rates so that  
59 the industrial rate structure parallels the proposed NLP rate  
60 design. Five, consolidation of the separate island industrial  
61 rates into a single rate class for cost of service allocation.  
62 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
63 these recommendations would ... the implementation of  
64 these recommendations would result in similar rate forms  
65 for both Newfoundland Power and the island industrial  
66 customers?  
67 MR. BRICKHILL: Yes.  
68 MS. HENLEY ANDREWS, Q.C.: And if you look at the  
69 bottom of page 52, you see that it says that the existing  
70 energy only rate for Newfoundland Power is probably  
71 wasteful of capacity due to the lack of a demand charge  
72 and economically inefficient because the energy charge is  
73 thereby substantially in excess of marginal energy cost. Do  
74 you agree that this opinion is different than the opinion  
75 that Foster and Associates is expressing in this hearing?  
76 MR. BRICKHILL: That's correct.  
77 MS. HENLEY ANDREWS, Q.C.: And it goes on to say that  
78 the lack of a suitable demand charge inhibits a DSM  
79 program and both demand and energy reduction since  
80 savings in demand by Newfoundland Power are not  
81 reflected in a reduction in demand charges, and do you  
82 agree or disagree with that statement?  
83 MR. BRICKHILL: I would disagree with that statement  
84 insofar as whatever incentives there are for a DSM program  
85 by Newfoundland Power, I don't think they would be  
86 particularly necessarily even in the right direction affected  
87 by demand energy rate.  
88 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
89 there have been no substantial changes in the business of  
90 Newfoundland Hydro since 1992?  
91 MR. BRICKHILL: No, I would not agree. In the early  
92 1990's substantial load growth would have been expected.  
93 Substantial incremental generating capacity required by

1 Hydro as indicated by some information that was given to  
2 me yesterday by Newfoundland Power that there hasn't  
3 been any peak growth to speak of in the past decade, so  
4 the value of conserving capacity is not seen today as high  
5 as it was in the early 1990's.

6 MS. HENLEY ANDREWS, Q.C.: Are you aware that Hydro  
7 is adding capacity for 2003?

8 MR. BRICKHILL: Yes, I am.

9 MS. HENLEY ANDREWS, Q.C.: And are you aware that  
10 Hydro is also forecasting a need to add additional capacity  
11 by 2006/2007?

12 MR. BRICKHILL: That's correct.

13 MS. HENLEY ANDREWS, Q.C.: And are you aware that  
14 Hydro is forecasting peak growth of 20 percent over the  
15 next ten years?

16 MR. BRICKHILL: I was unaware of that.

17 MS. HENLEY ANDREWS, Q.C.: And you see on page 53  
18 of the report that one of the issues that is raised with  
19 respect to a three part rate structure is that use of a demand  
20 charge for Newfoundland Power raises the following  
21 issues, and one of them is susceptibility to untoward  
22 manipulation by means of NP owned generation.

23 MR. BRICKHILL: What page are we on?

24 MS. HENLEY ANDREWS, Q.C.: Page 53, it's item four.

25 MR. BRICKHILL: Yes, I see that.

26 MS. HENLEY ANDREWS, Q.C.: And that is a similar  
27 concern to that which you have raised in your evidence?

28 MR. BRICKHILL: That's correct. I wouldn't ... I don't, I  
29 didn't suggest untoward behaviour.

30 MS. HENLEY ANDREWS, Q.C.: No, but you suggested  
31 manipulation.

32 MR. BRICKHILL: Manipulation in their self interest which  
33 would not be untoward.

34 MS. HENLEY ANDREWS, Q.C.: When you look at ... I  
35 wasn't actually suggesting untoward either, Mr. Brickhill.  
36 If you look at the discussion of the cost basis for the level  
37 of the demand charge in the first paragraph, Dr. Surekais  
38 had testified, or his report indicated that the cost basis for  
39 an NP demand charge could be either allocated or marginal  
40 cost. Would you agree with that?

41 MR. BRICKHILL: Yes.

42 MS. HENLEY ANDREWS, Q.C.: And when you go over to  
43 the top of page 54, there's a recommendation in the last  
44 sentence of the first paragraph that the demand energy and  
45 customer charges for the three part rate be established by

46 means of an equi-proportional scaling of marginal costs to  
47 a level that results in rates that yield the target revenue. Do  
48 you have any ... can you explain to me what that could  
49 possibly mean?

50 MR. BRICKHILL: You adjust, you calculate the class or  
51 customer embedded revenue requirement, then calculate  
52 the long-run incremental cost demand rate, and short-run  
53 marginal cost energy rate, and reduce those two in  
54 proportion to the total of these marginal costs, divided by  
55 the embedded cost.

56 MS. HENLEY ANDREWS, Q.C.: Okay (*laughter*). What  
57 is the effect of that?

58 MR. BRICKHILL: Dr. Surekais and I have argued this for  
59 years. I think effectively you go back to the original  
60 embedded cost rates, or pretty close to that.

61 (*3:45 p.m.*)

62 MS. HENLEY ANDREWS, Q.C.: Now you can see that in  
63 the next section, there is a discussion of a concept of a  
64 demand ratchet. Could you explain to me what a demand  
65 charge ratchet is?

66 MR. BRICKHILL: It establishes the power on order level at  
67 the highest experienced level over the past twelve months  
68 but it's never less, it's not less than power on order. The  
69 power on order only comes up if you exceed power on  
70 order, but it doesn't go down if you don't exceed or reach  
71 power on order.

72 MS. HENLEY ANDREWS, Q.C.: So does that in effect  
73 mean that in the case of Newfoundland Power, that if it  
74 forecast a demand for an amount of power on order using  
75 this type of a system, and turned out to be wrong, and its  
76 peak, for whatever reasons, was higher than it had  
77 anticipated, that its amount of power on order would  
78 automatically be adjusted upwards for that period of time  
79 to reflect that increased peak?

80 MR. BRICKHILL: For at least twelve months, yes.

81 MS. HENLEY ANDREWS, Q.C.: For at least twelve  
82 months. And you see in that paragraph that there is a  
83 reference to an acceptable variant which is to base the  
84 ratchet on the highest demand in the seasonal peak period  
85 for the total system.

86 MR. BRICKHILL: That's correct.

87 MS. HENLEY ANDREWS, Q.C.: And do you agree that  
88 that's an acceptable variant?

89 MR. BRICKHILL: It's a variant, as an electric customer who  
90 objects to such ratchets, I hate to call it acceptable, but  
91 sometimes ratchets produce inefficient or untoward results.

92 MS. HENLEY ANDREWS, Q.C.: When ... the subsequent

1 sentence in that paragraph indicates that an advantage of  
2 the use of a ratchet is revenue stability since the revenue  
3 derived from demand charges will reflect to a lesser degree  
4 demand variations caused by climate and economic  
5 variables. That indicates that in the, indicates to me that in  
6 the opinion of Foster and Associates in 1991, the revenue  
7 stability issue could be addressed adequately in a three  
8 part demand rate, a three part demand rate, a three part rate?

9 MR. BRICKHILL: Not the revenue stability issue from  
10 Newfoundland Power's standpoint.

11 MS. HENLEY ANDREWS, Q.C.: No, but from Hydro's?

12 MR. BRICKHILL: My testimony has been I don't think  
13 there is a revenue stability issue in the demand rate.

14 MS. HENLEY ANDREWS, Q.C.: Okay.

15 MR. BRICKHILL: For Newfoundland Power that affects  
16 Newfoundland Hydro.

17 MS. HENLEY ANDREWS, Q.C.: And you'll see that at the  
18 bottom of page 54, the evidence is that, or the report  
19 indicates that the use of a demand ratchet will encourage  
20 peak shaving because a reduction in the annual peak for  
21 the customer will also reduce the demand in all the months  
22 in which the ratchet applies, and would you agree with  
23 that?

24 MR. BRICKHILL: I would agree with that.

25 MS. HENLEY ANDREWS, Q.C.: Okay, sorry. I thought  
26 you were going to continue. One of the issues that's  
27 addressed in the report commences on page 55, which is  
28 that, and that's the impact of the Rate Stabilization Plan,  
29 and the report indicates what we know, which is that the  
30 Rate Stabilization Plan adjusts for changes in energy sales,  
31 but that it does not adjust for changes in demand charges  
32 at the present time, and indicates that for that reason, any  
33 downward fluctuation in demand charge revenue resulting  
34 from a reduction in billing units due to weather, DSM, or  
35 other causes, will result in a deficiency, and you can see  
36 that the opinion at the time was that the use of a two part  
37 demand energy rate form for Newfoundland Power would  
38 increase the financial risk of cost recovery for Hydro, but  
39 that it would be mitigated if the magnitude of the demand  
40 charge is given a lower priority than the energy charges in  
41 terms of setting prices equal to marginal cost. Do you  
42 agree with that?

43 MR. BRICKHILL: That is correct, but what he's talking  
44 about here is reducing the demand charge more than the  
45 energy charge, so as to reduce potential downside  
46 recovery.

47 MS. HENLEY ANDREWS, Q.C.: And then there's a  
48 subsequent reference to a device that would eliminate the  
49 risk, would be a contract provision calling for billing

50 demand to be as a minimum equal to an agreed upon  
51 contract demand for the period between rate cases?

52 MR. BRICKHILL: That's correct.

53 MS. HENLEY ANDREWS, Q.C.: And it says it might not  
54 be acceptable to the customer or the regulator and would  
55 be at odds with the ... that that option would be, also be at  
56 odds with the objectives of the DSM program, agreed?

57 MR. BRICKHILL: That's correct.

58 MS. HENLEY ANDREWS, Q.C.: And you can also see that  
59 with respect to the susceptibility to manipulation, that the  
60 opinion expressed at the bottom of page 56 is that flexibility  
61 should not be confused with manipulation, but flexibility  
62 can result in a mutual advantage. A sound approach is to  
63 view Hydro and its customers with generation as a single  
64 entity when considering economic operating practices,  
65 then adjust pricing so that when operating in such a  
66 manner both share in any benefits. It would be necessary  
67 to include rate provisions that will inhibit operating  
68 practices that increase total cost for the entity, but provide  
69 an advantage to only one of the parties. And it goes on to  
70 say that the primary safeguard against manipulation is to  
71 ensure that payments to Hydro are based upon the  
72 customer's total demand less the assured capability of the  
73 customer owned generation, and there's a discussion of a  
74 reserve for the customer's capacity, so do you agree that  
75 the opinion expressed by Foster and Associates at the time  
76 was that the potential for, I guess, the pejorative word  
77 would be manipulation and the more neutral word would be  
78 flexibility, is that these issues can be dealt with in terms of  
79 rate structure?

80 MR. BRICKHILL: They can be dealt with in terms of rate  
81 structure but we're talking a different order. What Dr.  
82 Surekais is suggesting as a conservation measure, if you  
83 will, as a result of this is what Hydro prefers not to happen,  
84 which is for Newfoundland Power to control solely for its  
85 own benefit its generation.

86 MS. HENLEY ANDREWS, Q.C.: If Newfoundland Power  
87 controlled solely for its own benefit its generation, then it  
88 would not be able to take advantage of a generation credit,  
89 would you agree?

90 MR. BRICKHILL: That's correct.

91 MS. HENLEY ANDREWS, Q.C.: Because the generation  
92 credit is premised on the idea that Newfoundland Power's  
93 capacity is available to meet system peak and the only  
94 flexibility that Newfoundland Power can get with respect to  
95 a three-part rate is ability to shave its peak, correct?

96 MR. BRICKHILL: That's correct.

97 MS. HENLEY ANDREWS, Q.C.: You see that on the  
98 bottom of page 57, again, the opinion that's expressed is

1 that it is important that unwarranted advantages not be  
2 given to partial requirement customers. Do you agree with  
3 that as a general principle?

4 MR. BRICKHILL: I'm not sure I know what he means by a  
5 partial requirement customer.

6 MS. HENLEY ANDREWS, Q.C.: Okay, I think we probably  
7 have to go back to the previous page, the second last  
8 paragraph ... yeah, the second and third paragraphs under  
9 "Susceptibility to Manipulation". One says that a full  
10 requirements utility customer is one with no owned  
11 generation, and therefore has no control over demand and  
12 energy. And the next paragraph says that a partial  
13 requirements customer, particularly as a utility, has the  
14 ability to adjust demand and energy requirements as  
15 viewed by Hydro within the limits of the difference between  
16 load and generating capacity, ability to store energy, and  
17 ability to interchange power with entities other than Hydro.  
18 So in the light of that definition of partial requirements  
19 customer, do you agree that it's important that unwarranted  
20 advantages not be given to partial requirements customers?

21 MR. BRICKHILL: I would agree. As a practical matter  
22 though, having read the entire paragraph, I'm not too sure  
23 what his point is.

24 MS. HENLEY ANDREWS, Q.C.: I think if you look at the  
25 second sentence after that, he says that otherwise the  
26 potential effect of those rate provisions would be to  
27 encourage full requirements customers, that are those who  
28 purchase all, who don't have any of their own generation,  
29 to install some form of generation to get the same  
30 advantages.

31 MR. BRICKHILL: Well, the reason I say I don't know what  
32 his point is is I'm not aware of there being any other, there  
33 being a full requirements customer, utility customer, and I  
34 think most of the industrials do furnish part of their own  
35 needs, so that there aren't any full requirements people you  
36 have to worry about in this environment, in this situation.

37 MS. HENLEY ANDREWS, Q.C.: What about North  
38 Atlantic Refining?

39 MR. BRICKHILL: I don't know.

40 MS. HENLEY ANDREWS, Q.C.: Okay.

41 MR. BRICKHILL: That's why I said most customers.

42 MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, it's 3:00.  
43 Do you prefer to go to 3:15?

44 MR. NOSEWORTHY, CHAIRMAN: If it's convenient for  
45 you we can break now or go to 3:15, it doesn't really matter.  
46 I just thought 3:15 breaks up the evening a little bit better,  
47 or the afternoon, I should say.

48 MS. HENLEY ANDREWS, Q.C.: It really doesn't matter to

49 me.

50 MR. NOSEWORTHY, CHAIRMAN: Well, we'll go to 3:15.

51 (3:00 p.m.)

52 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, I want you  
53 to take a look at Dr. Surekai's supplemental evidence in the  
54 January 1992 rate hearing.

55 MR. KENNEDY: **IC-4**, I believe, counsel.

56 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, you can see  
57 from page 20 of Dr. Surekai's supplemental evidence in  
58 January of 1992, that the question that was proposed was  
59 whether he agreed with the use of a non-ratcheted demand  
60 charge as recommended by Mr. Brockman, and he indicates  
61 that he does not, and if there were to be a three part rate for  
62 Newfoundland Power, would you prefer a ratcheted  
63 demand charge, or a non-ratcheted demand charge?

64 MR. BRICKHILL: Are you asking if I were Newfoundland  
65 Power?

66 MS. HENLEY ANDREWS, Q.C.: No, I said if ... I'm asking  
67 your opinion on behalf of Hydro, is whether you would  
68 prefer in that scenario with a three part rate for  
69 Newfoundland Power, would you recommend a non-  
70 ratcheted demand charge or a ratcheted demand charge?

71 MR. BRICKHILL: I really can't say offhand. I'd have to  
72 look at all the circumstances.

73 MS. HENLEY ANDREWS, Q.C.: Okay, and could you read  
74 out the paragraph that begins at line 22 of Dr. Surekai's  
75 testimony?

76 MR. BRICKHILL: Hydro must provide capacity for NLP's  
77 plan for a peak demand. If actual demand is less there will  
78 be no savings for Hydro. If actual demand is higher than  
79 the planned for peak, then NLP and other customers will  
80 have a greater risk of outage. If there is no ratchet and the  
81 billing demand in each month is based upon the actual  
82 demand established in the respective month instead of the  
83 planned for peak demand, there may be an incentive for  
84 NLP to over forecast by a comfortable margin and only pay  
85 to have for the actual demand established. Also NLP could  
86 use DSM to reduce monthly peaks and therefore its  
87 demand charges without a concomitant reduction in  
88 demand cost for Hydro.

89 MS. HENLEY ANDREWS, Q.C.: So would you agree that  
90 based upon that evidence it would appear that a ratcheted  
91 demand charge would reduce Hydro's business risk? In  
92 other words, it would provide it with a stable contribution  
93 to its fixed costs.

94 MR. BRICKHILL: I think he is arguing with a demand level  
95 or power on order level that changes each month based  
96 upon the actuals in that month, and I don't think that's an

1 option being considered here, so I think, certainly a ratchet  
2 ... here he seems to be arguing against a ratchet.

3 MS. HENLEY ANDREWS, Q.C.: If you look at the previous  
4 paragraph it says that Hydro's capacity related cost of  
5 service is essentially a function of the peak demand it must  
6 supply assuming no significant change in load factor, and  
7 since NP's peak demand is coincident with Hydro's peak in  
8 virtually every year, it's the singular NP demand that is of  
9 prime importance and it therefore says peak demands in  
10 other months will have little, if any, impact on cost of  
11 service, thus the appropriate rate form is an annual demand  
12 charge payable on a monthly basis, and his opinion, this is  
13 equivalent to the use of 100 percent demand ratchet. Does  
14 that give you a better context?

15 MR. BRICKHILL: Not really.

16 MS. HENLEY ANDREWS, Q.C.: Okay, would you agree  
17 that these facts would also support the use of a 1-CP  
18 allocator?

19 MR. BRICKHILL: Yes.

20 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, what has  
21 happened since 1992 to your knowledge that would cause  
22 both Newfoundland Power and Hydro to prefer an energy  
23 only rate for Newfoundland Power instead of a three part  
24 rate which they were both promoting in the 1990-1992  
25 period?

26 MR. BRICKHILL: I can't affirm nor can I deny that they  
27 were both proposing such a rate structure, or wanted such  
28 a rate structure in the early 1990's. They may have been  
29 responding to the Board or other pressures but I simply  
30 don't know enough about what was in their minds at that  
31 time to respond in any event.

32 MS. HENLEY ANDREWS, Q.C.: You would agree,  
33 however, that Dr. Surekai's testimony in 1992, as reflected  
34 in IC-2, at page 15, lines 20 to 24, is that he was  
35 recommending option two, which is a three part rate with a  
36 demand charge and energy charge and a customer charge.

37 MR. BRICKHILL: Without seeing the context of his  
38 testimony, I don't know that I could say that he was  
39 speaking on behalf of Hydro or speaking on behalf of  
40 himself, or what the context of the testimony was.

41 MS. HENLEY ANDREWS, Q.C.: Now you will agree,  
42 however, that the question that was put at that time, which  
43 is what is your recommendation with respect to the design  
44 of a rate for NLP, he has answered, I recommend option  
45 two.

46 MR. BRICKHILL: That is correct, and option two is not on  
47 the table by any party in this case.

48 MS. HENLEY ANDREWS, Q.C.: It's not on the table by

49 Hydro or Newfoundland Power in this case.

50 MR. BRICKHILL: Or the industrials. Again, option two  
51 was a marginal energy rate and embedded demand rate,  
52 which is not on the table as far as I know in this case.

53 MS. HENLEY ANDREWS, Q.C.: That will be a good place  
54 to break, Mr. Chairman.

55 MR. NOSEWORTHY, CHAIRMAN: Thank you, we'll  
56 adjourn then till 25 after.

57 (break)

58  
59 (3:35 p.m.)

60 MR. NOSEWORTHY, CHAIRMAN: Sorry for the  
61 unavoidable delay. I ask you, Ms. Henley Andrews, to  
62 continue, please with your cross examination.

63 MS. HENLEY ANDREWS, Q.C.: Thank you, Mr. Chairman.  
64 Mr. Brickhill, before we broke with respect to the demand  
65 energy rate for Newfoundland Power, you had indicated  
66 that you weren't sure who was proposing what at that time  
67 and I'd like you to take a look at CA-1, and I think you're  
68 going to need the hard copy because I'm looking at the  
69 report of the Board in 1992, and the quickest way to find  
70 what I'm looking for is to go to the very end of CA-1, which  
71 should be a page called excerpt from OC-92-216, and work  
72 your way backwards to page 94, and you can see that  
73 there's a reference to the discussion and it says at the end  
74 of the first paragraph, "In the current referral, Hydro  
75 proposed an energy only rate of 47.06 mils per kilowatt  
76 hour, subsequently revised for NP to become effective on  
77 May 1st, 1992 and then should the Board conclude that a  
78 three part rate for sales to NP is superior to the existing  
79 energy only rate, then Hydro proposes that the rate  
80 effective January 1st, 1993 consists of a specifically  
81 assigned charge of \$212,989 per month, a demand charge of  
82 \$4.51 per kilowatt per month, and an energy charge of 34  
83 mils per kilowatt hour. It says this ...

84 MS. GREENE, Q.C.: Excuse me, I don't think Mr. Brickhill  
85 has found that reference yet.

86 MS. HENLEY ANDREWS, Q.C.: Oh, I'm sorry.

87 MS. GREENE, Q.C.: CA-1.

88 MS. HENLEY ANDREWS, Q.C.: Go back from the end to  
89 page 94.

90 MR. BRICKHILL: Yeah, I have it before me now.

91 MS. HENLEY ANDREWS, Q.C.: Okay, I'm sorry, I'll start  
92 again. You can see that in the first paragraph, the last  
93 sentence, the report says that in the current referral Hydro  
94 proposed an energy only rate of 47.06 mils per kilowatt  
95 hour for NP to become effective on May 1st, 1992 and then

1 goes on in the next paragraph to say should the Board  
2 conclude that the three part rate for sales to NP is superior  
3 to the existing energy only rate, then Hydro proposes that  
4 the rate effective January 1st, 1993 consist of a specifically  
5 assigned charge of \$212,989 per month, a demand charge of  
6 \$4.51 per kilowatt per month and an energy charge of 34  
7 mils per kilowatt hour. This proposal was outlined as  
8 Option 2 on page 15 of the prefiled evidence of Dr.  
9 Surekais, and then there's a discussion of the ratcheting  
10 and you see the Board's conclusion on page 95 in the  
11 second paragraph that the implementation of a demand  
12 energy rate without a demand ratchet will expose Hydro to  
13 a risk with respect to the recovery of its revenue  
14 requirement which is not now present with the energy only  
15 rate form and before the break, you'd agree that that finding  
16 is consistent with Dr. Surekais' evidence with respect to the  
17 ratchet?

18 MR. BRICKHILL: Yeah, that's correct.

19 MS. HENLEY ANDREWS, Q.C.: Then you can see in the  
20 following page that Mr. Hamilton testified one reason NP  
21 initiated the proposal for demand energy rate form from  
22 Hydro was the difficulty NP in designing its rates in order  
23 to send a proper price signal in terms of the cost of existing  
24 capacity to its customers, so you would agree that that  
25 sentence implies that Newfoundland Power had initiated  
26 the proposal for demand energy rate?

27 MR. BRICKHILL: That sentence in isolation indicates that  
28 it appears to me this was initiated by the Board.

29 MS. HENLEY ANDREWS, Q.C.: The sentence says that  
30 Mr. Hamilton, who I can tell you at the time was a  
31 Newfoundland Power witness, testified that one reason  
32 Newfoundland Power initiated the proposal, you would  
33 agree that that's what it says?

34 MR. BRICKHILL: That's what it says.

35 MS. HENLEY ANDREWS, Q.C.: And if you look at page 97  
36 of the report, you see that the last paragraph before the  
37 conclusion says that Newfoundland Power has  
38 recommended the addition of a demand component to  
39 Hydro's RSP and NP RSA as an alternative to the twelve  
40 month demand ratchet proposed by Hydro and in this way  
41 Hydro's concern for protection from under recovery of its  
42 cost can be met while the two utilities gain experience with  
43 both the split rate form and load forecasting for the  
44 purpose of demand billing. So that would appear that  
45 Newfoundland Power has made a recommendation to try  
46 and alleviate its potential for revenue volatility?

47 MR. BRICKHILL: That would be the case, yes.

48 MS. HENLEY ANDREWS, Q.C.: And the conclusion is  
49 that the Board recommended the energy only rate for May  
50 1st and recommended that Hydro and Newfoundland

51 Power develop an acceptable rate form for review by the  
52 Board at the hearing on their cost of service methodology.  
53 Correct?

54 MR. BRICKHILL: That's correct. Therefore, I think, to clear  
55 up the record, it should be clear that Dr. Surekais' testimony  
56 supporting Option 2 was not consistent with the idea that  
57 Newfoundland Hydro proposed a three part rate, it is if we  
58 have a three part rate, this is the way we want it.

59 MS. HENLEY ANDREWS, Q.C.: Mr. Brickhill, I think you'd  
60 have to agree in that regard that, in the absence of a review  
61 of both the evidence and submissions of the 1990 hearing,  
62 anything that either one of us might say on that would be  
63 speculative.

64 MR. BRICKHILL: I don't think so, not when the Board said  
65 should the Board conclude that a three part rate for sales to  
66 NP is superior to the existing energy only rate, then Hydro  
67 proposes that the rate effective January 1, 1993 consist of  
68 a specifically assigned charge ... going on with the details.

69 MS. HENLEY ANDREWS, Q.C.: You would agree that the  
70 evidence and the report with respect to the 1990 hearing  
71 would be on the record of the Board?

72 MR. BRICKHILL: I would agree.

73 MS. HENLEY ANDREWS, Q.C.: And that therefore the  
74 Board could consult the 1990 record and the 1992 record if  
75 it required clarification on that point, as to who was  
76 proposing what in 1990? I don't think there's any ...

77 MR. BRICKHILL: I think it's quite clear here ... in the  
78 current referral Hydro proposes an energy only rate of 47.06  
79 mils per kwh for NP. Should the Board conclude that a  
80 three part rate for sales to NP is superior to the existing  
81 energy only rate then Hydro proposes that the rate  
82 effective January 1, 1993 consist of a specifically assigned  
83 charge with the details, and noting that that's Option 2 in  
84 Dr. Surekais' testimony.

85 MS. HENLEY ANDREWS, Q.C.: I think, Mr. Brickhill, I'll  
86 leave that for legal argument. The, one of the things that  
87 we dealt with this morning when we were talking about, or  
88 this afternoon, when we were talking about the NP  
89 generation credit, does the NP generation credit reduce  
90 Newfoundland Power's CP for the purpose of allocation of  
91 transmission demand costs?

92 MR. BRICKHILL: The answer is yes.

93 MS. HENLEY ANDREWS, Q.C.: With respect to the non-  
94 firm rates or the interruptible rates proposed for the  
95 industrial customers, are you familiar with the Yukon  
96 electric system or the Northwest Territories electric  
97 systems?

98 MR. BRICKHILL: Not very, no. I know that they exist and

- 1 that's about it.
- 2 MS. HENLEY ANDREWS, Q.C.: Are you aware that these  
3 and the rail belt system in Alaska are non-interconnected  
4 transmission systems which combine hydroelectric and  
5 thermal generation to serve their areas?
- 6 MR. BRICKHILL: No.
- 7 MS. HENLEY ANDREWS, Q.C.: You're not aware of that?
- 8 MR. BRICKHILL: I'm not aware of that.
- 9 MS. HENLEY ANDREWS, Q.C.: Would you agree that for  
10 non-interconnected systems, such as Hydro's, which are  
11 effectively large isolated systems, I suppose, that imposing  
12 demand on the system causes costs which are separate  
13 from those for increasing energy?
- 14 MR. BRICKHILL: I don't think they'd be considered large.  
15 I would consider them small.
- 16 MS. HENLEY ANDREWS, Q.C.: But they're isolated?
- 17 MR. BRICKHILL: That they're isolated and I didn't  
18 understand the question.
- 19 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
20 during normal load periods that variations in energy loads  
21 result in incremental increases in fuel costs, for example, at  
22 Holyrood?
- 23 MR. BRICKHILL: I guess I'm still confused, you're talking  
24 about rural isolated and Holyrood?
- 25 MS. HENLEY ANDREWS, Q.C.: No, I'm talking about  
26 variations in energy load, doesn't matter which customer,  
27 that the, in a normal load period, as opposed to during  
28 peak, but in a normal load period, variations, as in increases  
29 in the energy load, only increase the fuel costs?
- 30 MR. BRICKHILL: That's correct.
- 31 MS. HENLEY ANDREWS, Q.C.: And that if it's a time  
32 when Holyrood generation is required to meet the demand  
33 that it would be the fuel cost at Holyrood which would be  
34 impacted?
- 35 MR. BRICKHILL: That's correct.
- 36 MS. HENLEY ANDREWS, Q.C.: And if, in fact, the  
37 variation or increase in the energy load occurred when  
38 there was surplus hydro power available, in other words  
39 Holyrood was not in use, then there would be a very low  
40 incremental cost?
- 41 MR. BRICKHILL: That's correct.
- 42 MS. HENLEY ANDREWS, Q.C.: Do you agree that  
43 incremental sales programs such as the non-firm  
44 interruptible sales by Hydro can be priced to reflect the  
45 actual cost during those distinct time periods?
- 46 MR. BRICKHILL: They could be, yes.
- 47 MS. HENLEY ANDREWS, Q.C.: With respect to  
48 Newfoundland Power's load factor, would you agree that  
49 every bit of increase in Newfoundland Power's load factor  
50 impacts the industrial customers by increasing system load  
51 factor, and shifting more hydraulic generation costs to  
52 energy rather than demand?
- 53 MR. BRICKHILL: In the case of a rate case, yes. In  
54 between rate cases, it wouldn't.
- 55 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
56 similarly every increase in Newfoundland Power's load  
57 factor impacts the industrial customers by increasing the  
58 Holyrood forecast generation capacity factor, shifting more  
59 Holyrood generation costs to energy from demand?
- 60 MR. BRICKHILL: Yes.
- 61 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
62 the third element relating to increases in Newfoundland  
63 Power's load factor vis-a-vis the industrial customers, is  
64 that every increase in that load factor reduces  
65 Newfoundland Power's relative allocation of demand  
66 related costs based on coincident peak?
- 67 MR. BRICKHILL: Not necessarily, if the load factor  
68 increased solely due to energy, it would not. If the load  
69 factor increased due to a decline in peak or decline and be  
70 coupled with an increase in energy, then yes it would  
71 thusly impact the calculation.
- 72 MS. HENLEY ANDREWS, Q.C.: Complete change of  
73 subject. I want to ask you a few questions concerning the  
74 Rate Stabilization Plan. Have you had, or Foster  
75 Associates had any involvement in recommending  
76 methodology for the administration by Hydro of the Rate  
77 Stabilization Plan?
- 78 MR. BRICKHILL: Not that I recall.
- 79 MS. HENLEY ANDREWS, Q.C.: Are you aware that there  
80 are effectively three large components of the Rate  
81 Stabilization Plan, one of which is the load forecast  
82 variation adjustment?
- 83 MR. BRICKHILL: Yes.
- 84 MS. HENLEY ANDREWS, Q.C.: And do you agree that the  
85 load forecast variation adjustment distorts price signals?
- 86 MR. BRICKHILL: No.
- 87 MS. HENLEY ANDREWS, Q.C.: And why don't you  
88 agree?
- 89 MR. BRICKHILL: It simply reallocates costs among the  
90 customers but it doesn't distort price signals.
- 91 MS. HENLEY ANDREWS, Q.C.: So it doesn't send price



1 signals, would you agree that if the load is changing the  
2 fact that there is an adjustment in the RSP spreads out the  
3 impact of any increased costs associated with capacity or  
4 load?

5 MR. BRICKHILL: I don't understand what you mean.

6 MS. HENLEY ANDREWS, Q.C.: If Hydro, if Newfoundland  
7 Power forecasts a load which is less than, which is higher  
8 than its actual load, then its costs should go up, you would  
9 agree? Its contribution to the cost would go up, and if its  
10 load factor decreases it would normally pick up a greater  
11 share of the costs in the cost of service study.

12 MR. BRICKHILL: Well, are we talking about the RSP or the  
13 cost of service study?

14 MS. HENLEY ANDREWS, Q.C.: We're talking about the  
15 cost of service study and I'll get back to the RSP.

16 MR. BRICKHILL: If Newfoundland Power forecasts an  
17 increase in its load it would be allocated more demand  
18 costs, yes.

19 MS. HENLEY ANDREWS, Q.C.: As I understand the load  
20 forecast variation adjustment as it was explained to us by  
21 Mr. Osmond, if Newfoundland Power's load varies from  
22 what was forecast, then the adjustment is reflected in the  
23 RSP, a positive or negative adjustment?

24 MR. BRICKHILL: That's correct.

25 MS. HENLEY ANDREWS, Q.C.: The RSP adjustment is  
26 based on the Newfoundland Power energy only rate,  
27 correct?

28 MR. BRICKHILL: No, I don't think so.

29 MS. HENLEY ANDREWS, Q.C.: Well what is it based  
30 upon?

31 MR. BRICKHILL: It's based upon ADD.

32 MS. HENLEY ANDREWS, Q.C.: The evidence from Mr.  
33 Osmond, as I understood it, was that Hydro runs, in order  
34 to do the load adjustment to the RSP, both for the industrial  
35 customers and for Newfoundland Power, that Hydro runs  
36 a cost of service study every month which uses the actual  
37 data and then re-allocates the cost in that cost of service  
38 study to the customers, depending on the result, are you  
39 aware of that?

40 MR. BRICKHILL: That's correct.

41 MS. HENLEY ANDREWS, Q.C.: And would you agree that  
42 in doing that, because of the amount that is either added to  
43 or subtracted from the industrial customers or  
44 Newfoundland Power's Rate Stabilization Plan, that in effect  
45 that exercise is changing the costs allocated to those  
46 customers?

47 MR. BRICKHILL: That's correct.

48 MS. HENLEY ANDREWS, Q.C.: And that the net result of  
49 adjustments in the RSP adjustment rate, which as you know  
50 is averaged over three years, recovered over a period of  
51 three years, is in effect a rate adjustment?

52 MR. BRICKHILL: Yes, I think that's a fair characterization.

53 MS. HENLEY ANDREWS, Q.C.: Have you been consulted  
54 by Hydro with respect to its proposed treatment of  
55 transformer losses?

56 MR. BRICKHILL: I've been briefed on what might be some  
57 of the issues. I have not been asked for any opinions on  
58 that subject.

59 MS. HENLEY ANDREWS, Q.C.: Have you given opinions  
60 on that subject?

61 MR. BRICKHILL: I don't believe so.

62 MS. HENLEY ANDREWS, Q.C.: Would you agree that  
63 with respect to transformer losses as with respect to other  
64 aspects of the implementation of the cost of service  
65 methodology, that fairness would be an issue in terms of  
66 how transformer losses are dealt with for one customer  
67 versus another?

68 MR. BRICKHILL: Yes.

69 MS. HENLEY ANDREWS, Q.C.: And that you would  
70 expect consistency, as between customers?

71 MR. BRICKHILL: Yes, depending on the circumstances of  
72 those customers.

73 MS. HENLEY ANDREWS, Q.C.: Correct. I want to talk a  
74 little bit about or ask a few questions on Holyrood plant  
75 costs, and in particular can we look at your cost of service  
76 study, we might as well take the initial one that you filed,  
77 which is Schedule 4.3, page 93 of 94, and I take it that the  
78 calculation that is done here is the Holyrood capacity  
79 factor, correct?

80 MR. BRICKHILL: That's correct.

81 MS. HENLEY ANDREWS, Q.C.: And I also take it from  
82 Schedule 4.3 that the five year average that is used in that  
83 case includes the forecast for 2001?

84 MR. BRICKHILL: That's correct.

85 MS. HENLEY ANDREWS, Q.C.: So that the average is  
86 based partly on actual experience and partly on forecast?

87 MR. BRICKHILL: That's correct.

88 MS. HENLEY ANDREWS, Q.C.: And if you look at the  
89 2001 forecast for net capacity factor you would see that  
90 that 48.29 percent is significantly higher than the actuals in  
91 the previous four years.

- 1 MR. BRICKHILL: That's correct.
- 2 MS. HENLEY ANDREWS, Q.C.: So that the inclusion of  
3 the 2001 forecast distorts the five year average? It  
4 increases the five year average?
- 5 MR. BRICKHILL: Increases, I can't say that it distorts.
- 6 MS. HENLEY ANDREWS, Q.C.: Are you aware that for the  
7 purpose of establishing the volume of fuel forecast to be  
8 consumed in Holyrood for the 2002 year that Hydro has  
9 used average water conditions for its hydraulic plant?
- 10 MR. BRICKHILL: Yes.
- 11 MS. HENLEY ANDREWS, Q.C.: And are you aware that  
12 the years 1997, 1998, 1999 and 2000 were high water years?
- 13 MR. BRICKHILL: That's my recollection, yes.
- 14 MS. HENLEY ANDREWS, Q.C.: What is the impact of  
15 using a combination of components, some of which reflect  
16 average costs and some of which reflect high water years  
17 in doing the cost of service?
- 18 MR. BRICKHILL: The effect would be to reduce the fuel oil  
19 consumption of Holyrood.
- 20 MS. HENLEY ANDREWS, Q.C.: To reduce it or to increase  
21 it?
- 22 MR. BRICKHILL: If I understood the question it would be  
23 to reduce it.
- 24 MS. HENLEY ANDREWS, Q.C.: Would you agree that the  
25 amount of fuel which would be forecast to be consumed at  
26 Holyrood in an average hydraulic production year would  
27 be higher than the amount of fuel that would be expected  
28 to be consumed in a year with above average hydraulic  
29 production?
- 30 MR. BRICKHILL: Yes.
- 31 MS. HENLEY ANDREWS, Q.C.: When Newfoundland  
32 Power was asking you some questions yesterday I believe  
33 that one of the issues that was addressed was the issue of  
34 efficiency at Holyrood, do you recall that?
- 35 MR. BRICKHILL: No.
- 36 MS. HENLEY ANDREWS, Q.C.: Would you agree, or we  
37 heard evidence from Mr. Budgell that you would expect  
38 Holyrood efficiency to be higher in low water years  
39 because the use of Holyrood would be much greater in low  
40 water years, does that make sense to you?
- 41 MR. BRICKHILL: Yes.
- 42 MS. HENLEY ANDREWS, Q.C.: And similarly in an  
43 average water year you would expect the efficiency factor  
44 of Holyrood to be higher than in a high water year, correct?
- 45 MR. BRICKHILL: Correct.
- 46 MS. HENLEY ANDREWS, Q.C.: If you take the number of  
47 barrels of oil forecast for Holyrood based upon an average  
48 hydraulic production year and you use an efficiency factor,  
49 I'm going about it backwards, if you take the amount of  
50 generation required from Holyrood and you use an  
51 efficiency factor, based upon a high water year, you're  
52 going to forecast too many barrels of oil, aren't you, for that  
53 average year?
- 54 MR. BRICKHILL: Could you repeat the question please?
- 55 MS. HENLEY ANDREWS, Q.C.: Okay. If you take an  
56 average water year, then in an average water year there is  
57 going to be a certain amount of forecast energy required to  
58 be generated at Holyrood, correct?
- 59 MR. BRICKHILL: Correct.
- 60 MS. HENLEY ANDREWS, Q.C.: And in order to come up  
61 with the number of barrels of oil that would need to be  
62 purchased for that average water year you would utilize the  
63 efficiency factor, correct?
- 64 MR. BRICKHILL: Correct.
- 65 MS. HENLEY ANDREWS, Q.C.: And if you use an  
66 efficiency factor which is appropriate for the amount of  
67 generation from Holyrood in an average water year, you are  
68 comparing apples and apples, would you agree?
- 69 MR. BRICKHILL: Yes.
- 70 MS. HENLEY ANDREWS, Q.C.: But if you take an  
71 efficiency factor based upon an average of years where  
72 Holyrood has had very little generation, the efficiency  
73 factor as we previously discussed is going to be lower than  
74 it would be in that average year, correct?
- 75 MR. BRICKHILL: Correct, all other things being equal.
- 76 MS. HENLEY ANDREWS, Q.C.: That's right.
- 77 MR. BRICKHILL: In other words, as a generalization that's  
78 true, but Holyrood has three units and if the first unit is 100  
79 percent, it's real efficient, then if you go beyond that you  
80 only running the second unit at 10 or 20 percent, well the  
81 efficiency isn't all that great, so that subject to that caveat,  
82 the generalization, I think, would hold true.
- 83 MS. HENLEY ANDREWS, Q.C.: And therefore if you take  
84 your amount of generation that you need from Holyrood in  
85 an average year and you apply an efficiency factor to it,  
86 that would be what you would find in a year when you  
87 needed a lot less energy from Holyrood because of high  
88 water conditions, the number of barrels of oil that you  
89 would estimate for Holyrood would be higher than it ought  
90 to be, because the wrong efficiency factor would be used,  
91 would you agree?
- 92 MR. BRICKHILL: Yes, it is strong possibility that would

- 1 occur.
- 2 MS. HENLEY ANDREWS, Q.C.: Now when you look at  
3 Schedule 4.3, which is on the screen, of your 2002 forecast  
4 cost of service, that deals with capacity factor for  
5 Holyrood, correct?
- 6 MR. BRICKHILL: Correct.
- 7 MS. HENLEY ANDREWS, Q.C.: And you can see that the  
8 years that are used for the purpose of that are the years  
9 1997 to 2001, right?
- 10 MR. BRICKHILL: Right.
- 11 MS. HENLEY ANDREWS, Q.C.: But for efficiency, Hydro's  
12 uses the years '95 to '99, the average for '95 to '99. Does  
13 that appear to you to be inconsistent?
- 14 MR. BRICKHILL: I don't think I could say one way or the  
15 other because of weather conditions with which Hydro's  
16 people know far more than I do.
- 17 MS. HENLEY ANDREWS, Q.C.: What is the impact of  
18 Holyrood capacity factor on the revenue requirement?
- 19 MR. BRICKHILL: The Holyrood capacity factor affects the  
20 allocation of costs but not the level of total cost.
- 21 MS. HENLEY ANDREWS, Q.C.: And if the capacity factor  
22 is higher than it ought to be, in what way does the cost go?  
23 Let me rephrase the question, because it's a loaded  
24 question the way I phrased it. If the capacity factor for  
25 Holyrood is higher, how does that affect the allocation of  
26 those costs?
- 27 MR. BRICKHILL: If the capacity factor is higher in  
28 somebody's notion of what it ought to be, Newfoundland  
29 Power would be allocated less, and the industrials would be  
30 allocated more.
- 31 MS. HENLEY ANDREWS, Q.C.: And are you aware of  
32 what the Board's order was with respect to capacity factor  
33 and the average for capacity factor in the 1993 cost of  
34 service methodology report?
- 35 MR. BRICKHILL: I think they said to use a five year  
36 average.
- 37 MS. HENLEY ANDREWS, Q.C.: Of actual?
- 38 MR. BRICKHILL: I don't recall if they said actual.
- 39 MS. HENLEY ANDREWS, Q.C.: The average reflected on  
40 Schedule 4.3 does not use a five year average of actual,  
41 correct?
- 42 MR. BRICKHILL: Yes, it's four years of actual and one year  
43 forecast.
- 44 MS. HENLEY ANDREWS, Q.C.: Thank you Mr. Brickhill.  
45 Those are all my questions, Mr. Chairman.
- 46 MR. NOSEWORTHY, CHAIRMAN: Thank you very much,  
47 Ms. Henley Andrews. Thank you, Mr. Brickhill. It's now  
48 quarter after four, Mr. Browne would you care to begin.
- 49 MR. BROWNE, Q.C.: I believe that we're going to need  
50 some time to regroup following these examinations, but I  
51 think we should be able to examine the witness within two  
52 hours in the morning.
- 53 MR. NOSEWORTHY, CHAIRMAN: Okay.
- 54 MR. BROWNE, Q.C.: Maybe we'll wait till then.
- 55 MS. HENLEY ANDREWS, Q.C.: Mr. Chairman, as a matter  
56 of information when I disappear after today and Mr.  
57 Hutchings takes my seat, I won't be here for the next few  
58 days due to a death in the family.
- 59 MS. GREENE, Q.C.: Mr. Chair, if I might, I wanted to  
60 correct something from the transcript yesterday, if we had  
61 a few moments now it would only take a couple of minutes.  
62 Corrections in the units of measure that were used  
63 yesterday and I only noticed it, in fact I didn't even notice,  
64 I think I'm so used to knowing what the answer should be  
65 but it was brought to my attention and I do have the  
66 correction to give out now, so if I might, with your  
67 indulgence, do that now.
- 68 MR. NOSEWORTHY, CHAIRMAN: Sure.
- 69 MS. GREENE, Q.C.: The first correction I'd like to make was  
70 found in the transcript on page 1, and actually I do have  
71 the corrections now so perhaps if I gave them out first it'll  
72 be easier to follow. Now that everyone has them, the first  
73 correction I'd like to make is to line 73 of the transcript  
74 which related to the Wabush thermal station operating  
75 cost, and line 73 Mr. Osmond stated that it was .46 cents a  
76 kilowatt, if you look at what I handed out which is the  
77 bottom half of the sheet you'll see that it should have been  
78 mils per kilowatt hours, .46 mils per kilowatt hour, not cents.  
79 So on line 73, the word "cents" is changed to "mils", that's  
80 the correction that should be made. The second correction  
81 is found on page 2 of the transcript of yesterday and it  
82 relates to line 46, and this correction is found in the top half  
83 of the sheet I just circulated, and it is the cost in mils per  
84 kilowatt hour for the overall deficit allocation for Labrador  
85 interconnected and here what should happen in line 46, the  
86 decimal point needs to get moved. The answer should  
87 have been 8.68 mils per kilowatt hour. So if that is  
88 satisfactory, there's really two corrections to typographical  
89 things in the transcript, and I will ensure that Mr. Hearn is  
90 notified of those as well.
- 91 MR. NOSEWORTHY, CHAIRMAN: Thank you, Ms.  
92 Greene. Ms. Andrews, I'm sorry that you'll be away for a  
93 few days, our condolences to the family. I read it in the  
94 paper today ... actually I met the lady, I think it's the same  
95 lady, on a number of occasions, a mutual friend. She was

1 a fine, fine person. Thank you we'll reconvene at 2:00 in the  
2 morning (*laughter*) at 9:30 in the morning, it's been a long  
3 day.

4

5 (*hearing adjourned to November 28, 2001*)