Legislative Assembly of Manitoba

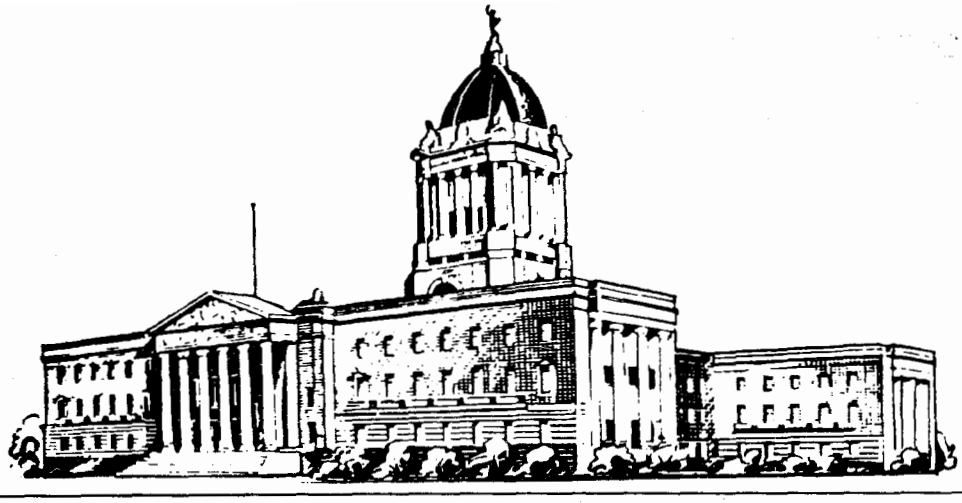
HEARING OF THE STANDING COMMITTEE

ON

PUBLIC UTILITIES AND NATURAL RESOURCES

Chairman

Mr.Harry Shafransky
Constituency of Radisson



TUESDAY, April 19, 1977, 10:00 a.m.

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TIME: **10:05 a.m. Harry Shafransky.**

MR. CHAIRMAN: The committee will come to order. We shall proceed with the Annual Report from the Chairman of Manitoba Hydro. Last day we had Mr. Lyon asking questions and Mr. Lyon you're still on. You may proceed.

MR. LYON: Thank you' Mr. Chairman. Just by way of preliminary, Mr. Chairman, Mr. Bateman was going to produce for us a copy of the draft task force report and also a copy of the ten year projections of costs and revenues for the years 1969 to 1979 and for the years 1976 to 1986. I believe I had also asked for, and I could be wrong on this, Mr. Chairman, if I haven't asked for it I'm asking for it now, if it would be possible for Hydro to prepare the table showing the cost per kilowatt, and the cost per kWh, for each of the generating plants now on the system and the year completed.

MR. BATEMAN: Well, Mr. Lyon, I mentioned to you the morning you indicated you would like to see the draft task force report that I had a copy in my briefcase. I presumed that since you didn't ask for it then you weren't interested in it but here it is. You can have that. I would like it back because that is the only copy that is available that hasn't been marked up for editing purposes.

MR. LYON: If it has your name on it I will guarantee to return . . .

MR. BATEMAN: No, it hasn't got my name on it but it's Report No. 20, I think it is, isn't it?

MR. LYON: Thank you, Mr. Bateman.

MR. BATEMAN: Now then the other information you were asking for — it's new — the data you want on plant date of completion. Two years ago, I believe, I showed all of that information to this committee. It's probably all recorded in the record, all of the cost in mills per kWh for each of the plants and the effect that size had on the costs and the effect that river flow had on costs, and also the effect that interest rates, the average increasing interest costs on our system had on the energy costs of those plants.

MR. LYON: You say that would be in Hansard of 1975?

MR. BATEMAN: I don't recall the exact year, Mr. Lyon, that I gave the committee all of that information but nevertheless it is all available in Hansard.

MR. CHAIRMAN: Those transcripts should be available in the Clerk's Office or in the Library, I'm sure.

MR. LYON: Thank you, Mr. Chairman.

MR. BATEMAN: Now then as far as the projected costs are concerned we could have Mr. Fraser who is the General Manager of Corporate Resources, under whose arm the financial reports are made, among other things, we could have him come forward and discuss this information. I believe he has some tables that he could give to the Clerk for distribution.

MR. CHAIRMAN: Mr. Fraser, would you care to take mike No. 11. Mr. Fraser, are you going to proceed?

MR. FRASER: Yes, Mr. Chairman, this is some material we had prepared between the last meeting and the one immediately preceding it. It contains about twenty years of information. The years from 1977-78 to 1986-87 are part of what we now produce as our integrated financial plan. This is a plan that we have been using, this will be the second year. It started in 1975. The other sheet provides equivalent information, actual information from the year 1967-68 up until the present time with an estimate for the year just ended.

Now there are literally hundreds and hundreds of individual assumptions go into the forecast and many many decisions but I can indicate very briefly for you the structure of the table. Revenues are total revenues from all sources. The expenses have been shown in three categories: operating and administrative expenses, depreciation and net interest costs. Transfers to or from reserves are shown. Capital expenditures by Manitoba Hydro are shown and on the first sheet there is an indication of what Atomic Energy of Canada Limited spent on the AC Lines in certain of those past years. The Manitoba Firm Load and Percentage Increase is shown and the Manitoba Firm Peak Demand in Megawatts and its percent increase is shown.

The one thing that might be interesting is in the years from 1968-69 to 1973-74 as you can see the percent increases in Manitoba Firm Load were running very high. They're high against any historical average which is roughly in the 7 percent range and then they have dropped off quite dramatically from 1974-75 onwards.

Now the generation forecast we have is based on the actual lake levels last August assuming minimum in-flows would commence in August. That has not happened but these forecasts will be updated this coming summer when the ice is gone and the lake levels and in-flows are more clearly established.

Provision has been made in all the future figures for estimated rates of inflation. This is a financial plan that was produced last November, as I said. It will be redone in view of the current information, this summer.

MR. CHAIRMAN: Are there any questions to Mr. Fraser on this? Mr. Lyon, do you have any questions?

MR. LYON: I was wondering if we could work out, and I was just on the course of doing it, Mr.

Chairman' what the average firm load increase was over this period.

MR. FSER: Which period?

MR. LYON: Over the period stated on the Page . . .

MR. CHAIRMAN: 1967 to 1977?

MR. LYON: Yes, over the ten-year period.

MR. FRASER: 7.8.

MR. LYON: 7.8 percent. That's the actual?

MR. FRASER: Yes.

MR. LYON: With the estimate, of course, for 1976-77?

MR. FRASER: Well no, I think that figure is an actual. That is instantaneously recorded.

MR. LYON: All right. So we did experience, over the ten-year period, an average of 7.8 percent.

MR. FRASER: 7.8 in firm load and 8.2 approximately in megawatts.

MR. LYON: That's the bottom line.

MR. FRASER: Yes.

MR. LYON: Thank you. And the second page? That's the projection, eh?

MR. FRASER: Yes but that projection calculates out at 7.24 for energy and 7.6 on peak demand.

MR. LYON: 7.24?

MR. FRASER: Yes. 7.6, on the bottom line.

MR. LYON: Thank you. And these dollars that are expressed on page 2, Mr. Chairman, are these constant dollars 1977 or what? How do we interpret it?

MR. FRASER: No, Mr. Chairman. Those are all fully escalated dollars based on escalation assumptions.

MR. LYON: And the escalation assumptions were . . .

MR. FRASER: That's a rather complex procedure. They're ranging at the moment for the next year, between nine and 13 percent, and get tapered off to between six and seven after 1982-83. It's done by a weighting. There is no single value given for the escalation figure. It's broken down into 10 categories, some of which have sub-categories. For example, Hydro generation has categories for dike work and mechanical work and electrical work and they're all taken a shot at weighting these and coming up with accumulative figures. They then are applied to the individual projects that are outlined in the ten-year plan. What you see here are the results of the application of each of these individual rates.

MR. LYON: Did your projection also show a projected rate increase for this period?

MR. FRASER: I don't have one here. This depends so much on the water flows and the return received for exports and so on. It roughly indicated doubling in about ten years.

MR. LYON: A doubling of rates in 10 years. That is over the next 10-year period.

MR. CHAIRMAN: Mr. Bateman.

MR. BATEMAN: I think, Mr. Chairman, we should make clear to Mr. Lyon that that doubling is based on these assumptions that the escalation rates that we are presently experiencing will continue and that the cost of money will still continue in the nine or nine and-a-half percent rate. Is that right, Mr. Fraser?

MR. FRAS Take interest rate ER: Yes. t down to nine. I think the forecasted value is nine percent over the last ten years.

MR. BATEMAN: On the other hand, if the rate of escalation or rate of inflation exceeds that which we have projected, then of course, the increases will be greater. Or perhaps, Mr. Lyon, you'd like to study those tables.

MR. LYON: Yes, thank you. I think that's sufficient information for the time being. If there's anything further after you looked at that, we'll come back to it.

MR. CHAIRMAN: Thank you. Mr. Premier, you have a question?

MR. SCHREYER: A supplementary on the same point. I'm wondering if Mr. Fraser and those who work with him on rate extrapolation and projections do occasionally run a check with sister utilities in other parts of the country to make doubly sure that what you are projecting is not undue. I think, for example, of British Columbia Hydro, where Mr. Bonnar advises that they are extrapolating 60 percent over the next five years. That kind of thing. Probably my question then is, when you've done your extrapolations, do you run some manner of check to see whether there is anything undue in what we are facing?

MR. FRAS Chairman, we ER: Yes, Mr. do run a number of checks, particularly on the escalation and interest rates forecast with the other major utilities. We also use Statistics Canada information to the extent we can. The main thing that each individual utility puts in his local labour rate, but as far as material and equipment prices go, we do have checks with the major utilities: Ontario Hydro, Quebec Hydro and James Bay Corporation, and B.C. Hydro. To answer your question, yes, we do check with these utilities.

MR. SCHREYER: Thank you.

MR. CHAIRMAN: Thank you, Mr. Fraser. Mr. Lyon, do you have any further questions at this time? Mr. Lyon proceed.

MR. LYON: Mr. Bateman, we were talking I think with Mr. McKean the other day about the costs of Jenpeg and Lake Winnipeg Regulation, and I believe Mr. McKean said that the figures as they appeared in the December 1, 1976 prospectus still obtained.

MR. BATEMAN: That is correct.

MR. LYON: Have you worked out internally what the cost would be of Lake Winnipeg Regulation without Jenpeg?

MR. BATEMAN: I'll ask Mr. Goodwin to come forward and take the microphone and review the costs relative to Jenpeg.

MR. CHAIRMAN: Mr. Goodwin.

MR. GOODWIN: Mr. Lyon, it is my understanding that we don't have any estimates of what it would have cost to do the Lake Winnipeg regulation job without the generating station there. Estimates were made at the time this was planned of course, and once we had adopted a plan, there was to be no looking back on that one.

MR. LYON: The original estimates for Jenpeg—and I'm going only from recollection, Mr. Goodwin—ranged somewhere between 50 and $100 million. Could you show us chronologicially where those estimates appear? I know Mr. Cass-Beggs made some mention in his report of September 1969 of a $50 million figure.

MR. GOODWIN: It's been gone over in this Committee' to my understanding. I don't have those figures handy, but it would all be in the transcript.

MR. LYON: Using your figures in 1971, Mr. Bateman, you estimated the cost of Jenpeg at $350 per kilowatt. Now in 1977, you said that the cost during 1976 would be $900 per kilowatt. Would that not indicate that there had been an escalation of something like 50 percent per year in the estimated costs of producing that energy?

MR. BATEMAN: Well, I think that on the basis of the figures I gave you last week of $350 a kilowatt, they were based on the best feasibility estimates that were available. In performing the work, there were supplementary things done that were found necessary to be done during the course of construction, and there is also this delay that we have experienced this year which, of course, means that the apparent cost of the project increases because the interest during construction is still being charged to the project as opposed to being charged to the operating account. But the actual rate of escalation on that job, I think, is consistent with what we are experiencing on other Hydro construction projects across Canada.

I think I also mentioned that we had indicated that if we had been building one of the Winnipeg River or Burntwood River plants today, we would be running into similar costs. I think I also told you that if we were to compare the Jenpeg power costs with the cost of power from Limestone, that Limestone power will be more expensive, as will the power costs from subsequent plants. And that's borne out by the assumptions that we have seen Mr. Fraser put forward based on the escalation rates that we are experiencing in Canada. They are not peculiar only to Manitoba. They're consistently evident across all construction projects in Canada. But perhaps northern projects are more affected than southern projects.

MR. LYON: I was going to say, dealing specifically however with Jenpeg and the comparison between the $350 per kilowatt estimate in 1971 and the $900 per kilowatt estimate in 1976, and what would appear to be an average escalation of about 50 percent per year, are you suggesting that this is the inflation rate that you are applying to all other projects on the line?

MR. BATEMAN: Nonot that high an escalation rate. But I think that there is a major difference between the $350 per kilowatt figure which was based upon a feasibility estimate which did not have all of the engineering data available. The first real estimate for Jenpeg was made by Mr. Harris Wilson, director of generation projects, who gave the Committee that figure two or three weeks ago to show what the first real estimate for Jenpeg was. And I have consistently, each year, reported to this Committee what the cost estimate was, what the increased costs were and why the costs were increased. That, I think, is all on the record. And they're very reasonable explanations.

MR. LYON: I think you would have to agree, Mr. Bateman, the explanations may be reasonable but the costs are rather fantastic, are they not?

MR. BATEMAN: I will agree that the costs for Jenpeg are high but they are not any higher as I point out, than you are going to experience starting tomorrow in building the next plant. If you start tomorrow and build the next plant, you are going to run into costs higher than that.

MR. LYON: Is the Jenpeg plant now operating?

MR. BATEMAN: The Jenpeg plant is not operating but we anticipate that it will be operating early summer. In fact, I understand from our staff that the first unit will be watered up — and that means that the water will be put into the chambers — and the mechanical runs will commence next month. We are still anticipating first commercial power out of Jenpeg early summer. Mr. Premier, I have a few pictures of Jenpeg. I didn't bring them, but pictures are meaningless to those who do not appreciate the magnitude of scale of this project. I would think that there would be great merit in having Mr. Lyon and some of his colleagues and the Legislature visit the Jenpeg project to see for themselves just how big this project is. The size of the power house and the size of the units make it very comparable in

physical size to the Grand Rapids project. I would issue that sort of invitation, Mr. Premier, if you could find the time suitable to your colleagues. We can get the transportation arranged, I would be glad to do that.

MR. LYON: You mean, of course, the physical size of Jenpeg relates to Grand Rapids.

MR. BATEMAN: Physical size, right. .

MR. LYON: Not the generating capacity.

MR. BATEMAN: Well, generating capacity is related to head and since this is a low-head plant, it hasn't got the capacity but it is indicative of just how big this job is to develop the power available from the water and we're really interested in the energy capability of the Jenpeg plant. It does have a billion kilowatt hours, and those who heard President Carter's comments last night about how serious the energy situation is, I think that we in Manitoba should be very, very pleased with the fact that we do have some hydraulic resources from which we can get energy, and even though they are high cost today, as I pointed out to the committee, the decreasing depreciation balance on these plants each year as you write the depreciation down, the cost of energy from them gets lower and lower. Now, contrast that with the anticipated increased costs of energy that are going to result in the United States because they are finally awakening to their energy position. They are short of energy. They have been living beyond their means for a good many years and we in North America are too dependent upon the oil and natural gas that will some day be gone forever. These water resources, I think, will be producing energy long after the last drop of oil comes out of Western Canada.

MR. LYON: That's an interesting observation, Mr. Bateman. I heard part of the speech myself and, as you would imagine, the thought that coursed through my mind was, does this not now indicate to us how much better off we would have been if we had proceeded with the Churchill River Diversion and the 30,000 c.f.s. cfs in 1972 so that we would have had that power generated from 1972 to 1977. But I imagine that's only a difference in outlook based upon the same speech.

MR. BATEMAN: Well, if you would like to go back to 1972, it was impractical to have contemplated having the Churchill River Diversion in place any sooner than we have got it in place and Mr. Goodwin, I believe, outlined some of those problems to you either last meeting or the meeting before. There are just a great number of difficulties associated with all of the negotiations relating to the mitigation work on the Churchill River Diversion route.

MR. CHAIRMAN: Mr. Premier, you have a question on this particular point?

MR. SCHREYER: Yes, Mr. Chairman. If we're going to second-guess the weather, I would like to ask Mr. Bateman if it is not a fact that until August of 1976 that you could in fact characterize the period up until August of last year as a period of relatively high flow.

MR. BATEMAN: Yes, the precipitation from the previous year had resulted in Lake Winnipeg being at high levels and it wasn't until August that it got down into the regulation range. That's when we were able to bring Lake Winnipeg under full control . So we had an abundance of water on the Nelson River and really didn't need much diversion water — we needed the diversion water last winter, not last summer.

MR. SCHREYER: Well, more specifically, would it be correct to say that up until last August, that for the period from say 1972 until last August, that the recorded flows on the Nelson were in fact above the long term average?

MR. BATEMAN: On the Nelson River?

MR. SCHREYER: Yes.

MR. BATEMAN: Yes, I think they were above the long term average.

MR. SCHREYER: My other point, Mr. Chairman, would be supplementary to the line of questioning. Would it be correct to say that $900 per installed kilowatt, which is perceived as being a high cost — and in a very immediate sense may be — is there any place where there is an undeveloped power site in Manitoba where Hydro engineers are confident that any installed capacity could be brought in for less than $900 per kilowatt, anywhere at all? — Conowapa, Grandville Falls, Burntwood sites, you name it.

MR. BATEMAN: I would like to ask Mr. Goodwin to answer that point, Mr. Premier. I think that we perhaps would be wise to look in terms of the cost of energy from these sites as opposed to the cost of capacity because really it is the energy that we are interested in, and if we think in terms of what the energy is worth in mills per kilowatt hour from Jenpeg as opposed to Long Spruce or some of the undeveloped sites on the Burntwood River, perhaps Mr. Goodwin, you could address yourself to some of those figures that relate to undeveloped sites.

MR. CHAIRMAN: Mr. Goodwin.

MR. GOODWIN: I think, Mr. Chairman, that we could answer the Premier's question with a quite definite "No." There is no site that we can develop in the future that will have a lower cost than Jenpeg, however it is measured. In terms of mills per kilowatt hour, I think the Jenpeg plant will be costing 17.5 mills per kilowatt hour. Comparatively, the Limestone station at 26.5 — significantly more. We have up-dated the estimates that Mr. Lyon spoke to at the last meeting, and the estimates, if those plants were being proceeded with now and without including any transmission costs because

these are somewhat harder to estimate than the on-site generating costs, the lowest cost plant on the Burntwood River would be the Wuskwatim plant; if it were possible to build it as envisaged ten years ago, would be 21.2 mills per kilowatt hour. The other plants would be higher cost with Manasan at 26; First Rapids at 31 and the generation at the Notigi site about 30 mills per kilowatt hour.

MR. LYON: Reverting back, Mr. Bateman, to a comment that you made just a few moments ago before the Premier's supplementary question, you say it would have been impossible, of course, to go ahead with CRD but, in fact, Manitoba Hydro had called tenders for contracts for the construction of the Missi Falls Dam and control structure in 1968 or 1969, had it not?

MR. BATEMAN: That is correct, Mr. Lyon. We had called for tenders but we had not resolved the mitigation problems on the Burntwood River diversion route and it would have been very embarrassing to Manitoba Hydro and to the citizens of Manitoba to have been held up by court action relating to the flooding of Indian reserve lands.

MR. LYON: Do you suppose that would have been any more embarrassing than the high rates of power that we have had to experience since because that wasn't followed through?

MR. BATEMAN: I will leave that to you and the people who are going to have to experience that situation. If you have no power, what is the situation relative to cost? Are you prepared to pay for the power you get or do you want to sit in the dark? That's a question that I think everyone will have to answer for himself.

MR. LYON: Can you tell us, Mr. Bateman, how much energy can be produced, the 30,000 c.f.s. from Churchill River through the Kettle Rapids plant?

MR. BATEMAN: Yes, I could get that information. I don't have that in the head figures right now but we have that information available. I am sure somebody can dig it up for me here.

MR. LYON: And on that same point, could we have your projections as to how much energy can be provided from 30,000 c.f.s. through the CRD, through all the plants on the Lower Nelson when they are completed?

MR. BATEMAN: Yes. I have published those figures in technical papers, Mr. Lyon, and I think you will find those figures are also available in the Task Force Report. If you would like us to dig them out, we will have them here.

MR. LYON: And also the annual value of that energy.

MR. BATEMAN: What do you want to put on the annual value of it? Do you want to price it at one cent per kWh, which is what we did in the draft task force report which our members subsequently felt was an unrealistic figure, or do you want to put half a cent on it or do you want to put two cents on it? You tell me what you want to put on it; I know the number of kWh then I will tell you how much it is valued at.

MR. LYON: You could give it to us in all three fashions, Mr. Bateman. We can pick and choose after we see them.

MR. BATEMAN: Well, if it's one cent a kWh, and if it is two cents a kWh, it would be twice that much.

MR. LYON: That's right. And if it's half, it will be half of one. So if you give it to us at two cents, I think we are agreeable to compute that kind of school boy arithmetic ourselves.

A MEMBER: If not, we have a school teacher that can.

MR. LYON: Now, could you tell us, Mr. Bateman, how much energy has been produced from the Selkirk and Brandon plants in the last twelve months?

MR. BATEMAN: The amount of energy produced at Selkirk and Brandon? Yes, we can get that for you. Perhaps while somebody is looking that up . . . I can give you the last fiscal year. Is that what you wanted, Mr. Lyon, the figures for the fiscal year or the calendar year?

MR. LYON: I think the calendar year to the latest date possible would be the most convenient figures.

MR. BATEMAN: Well, I can give them to the end of March . . .

MR. LYON: That would be good.

MR. BATEMAN: . . . which is the fiscal year. e Let's deal with Brandon first. Brandon, 12 months to the end of March 1977, 954.23 million kWh; Selkirk, to the end of March 1977, 511.89 million kWh; Amy Street, to the end of March, 23.19 million kWh. There was also a little power produced at gas turbines and diesels that were set into the primary system.

MR. LYON: And could you give us the cost of the fuel to produce that power in the period that you have stated?

MR. BATEMAN: I think I gave the committee that information previously but I will attempt to get that information again now. The cost of fuel related to so-many dollars per kWh.

MR. CHAIRMAN: You gave the comparison, Brandon and Selkirk.

MR. BATEMAN: Yes.

MR. LYON: We have that comparison.

MR. BATEMAN: Yes, I think that information has been presented. We can dig it out again.

MR. LYON: I just wanted the gross cost, the fuel cost. I remember we.had some information on transportation costs and so on, but I don't remember getting a gross cost.

MR. CHAIRMAN: Mr. Goodwin has the information.

MR. GOODWIN: Mr. Chairman, I think the average fuel costs at the Brandon plant last year would have been about 10 mills per kWh for coal and related chemicals, and for the Selkirk plant, 14.

MR. LYON: And how does that translate into gross dollars that laymen such as myself will understand?

MR. GOODWIN: The twelve-month figures to the end of last month are, of course, not available yet but in the eleven months to the end of February, our total fuel bill for the Brandon and Selkirk plants was about $12,300,000.00. I guess the total fuel bill for the past year would be in the neighborhood of $14 million.

MR. LYON: $14 million approximately.

MR. GOODWIN: Yes.

MR.BATEMAN: That figure, Mr. Lyon, includes some. . .

MR. GOODWIN: That's my estimate.

MR. LYON: Yes. Okay.

MR. CHAIRMAN: Thank you, Mr. Goodwin.

MR. LYON: — I think we have this from the prospectus Mr. McKean confirmed that he can so indicate — the current estimated cost of the Churchill River Diversion is that shown in the prospectus of December 1, 1976? Or is it . . . ?

MR. McKEAN: We haven't changed it since December 1, 1976.

MR. LYON: Mr. McKean says — he's not at a mike — he says that they haven't changed it since. . .

MR. CHAIRMAN: There has been no change.

MR. LYON: . . . since December 1, 1976. Will there be a change, Mr. Chairman? An upward escalation, I would presume.

MR. BATEMAN: No, I think that on the basis of our present estimate for Churchill River Diversion with what we know now of the mitigation works, there will be no change from the present estimate. If we were going to another prospectus within the next six months, I would anticipate that the figure would be the same. Is that correct, Harris?

MR. CHAIRMAN: Would you come forward, please?

MR. BATEMAN: Harris Wilson, our director of Generation Projects, under whose responsibility the construction of the Churchill River Diversion rests, will now explain what the estimate will likely be.

MR. CHAIRMAN: Mr. Wilson.

MR. WILSON: The current estimate for Churchill River Diversion is $214 million, roughly, rounded off. We don't anticipate there will be any increase in that total figure at the time of our next capital budget revision. It's not impossible there would be an increase. Our contingency allowance has been reduced to a fairly low figure for this type of project. If there is any increase in the costs it will be as a result of mitigation of which we're not aware; mitigation costs of which we are not aware today.

MR. LYON: So you're indicating that there is a change, then, from the prospectus, Mr. Wilson. It was estimated in the prospectus of $207 million.

MR. WILSON: That's correct.

MR. LYON: So it's now $214 million.

MR. WILSON: $214 million is our latest budget estimate.

MR. LYON: Fine. Subject to the contingencies about which you've . . .

MR. WILSON: That is our latest. It is subject to revision in August or September but we don't anticipate any large revision to it. As I say, if something untoward happens which we're not aware of it would have to go up because we do not have too much contingency in the Estimate.

MR. LYON: Could Mr. Wilson answer this question, Mr. Chairman. What part of the Churchill River Diversion is now reflected in the operating account?

MR. WILSON: Yes, I think a third of the $114 million roughly would be capitalized now.

MR. LYON: One-third of the $214 million.

MR. WILSON: $214 million, right.

MR. LYON: And that portion would therefore be reflected in the increased energy rates that Manitoba Hydro is charging its customers now.

MR. WILSON: Well, it will be in our financial plan. It will show that as an expense to operate.

MR. LYON: Thank you.

MR. BATEMAN: I think, Mr. Chairman, just to qualify the figure that I apparently misled Mr. Lyon on this morning. My memory indicates . . .

MR. LYON: Let me interrupt and say I don't think that you tried to mislead me on any figure, Mr. Bateman.

MR. BATEMAN: Well if I gave you the wrong figure, then, the $214 million I do recall now is what we mentioned at an earlier meeting of this committee this year.

MR. LYON: Yes. I was just noting that the prospectus said $207 million and I accept the figure of $214 million and expect that there probably will be a slight escalation still, but we're in the ballpark

generally of say $214 million to $220 million.

MR. CHAIRMAN: Thank you, Mr. Wilson. Any further questions, Mr. Lyon?

MR. LYON: Mr. Bateman, I'm going to read to you two paragraphs from Page 36 of Chapter 4 of the draft Task Force Report which you kindly provided for me this morning.

MR. BATEMAN: Would you just let me follow you there. Page 36?

MR. LYON: Page 36 of Chapter 4.

MR. BATEMAN: Of Chapter 4, yes.

MR. LYON: This document that you've sent over to me is the draft report, marked as such. The two bottom paragraphs on Page 36 read as follows, and I'm quoting.

"Some measure of the potential resource value of hydro may be obtained by evaluating the contribution it makes to the gross revenue of Manitoba Hydro."

MR. BATEMAN: I'm sorry, Mr. Lyon, I'm not in tune with your Page 36. Page 36 of Chapter 4, I'm with you now, yes.

MR. CHAIRMAN: Proceed, Mr. Lyon.

MR. LYON: That was the first paragraph. The second paragraph reads,

"Diversion water from the Churchill River can ultimately produce 14.38 times 10 to a factor of 9 kWh per year along the Burntwood-Nelson system. This quantity of energy, regardless of how it is produced, when sold at an average rate of one cent per kWh will contribute $148,380,000 annually to the gross revenue."

MR. BATEMAN: Yes, there is no question about that being in the draft report. The important thing is that the 14.38 times 10 to the 9th kWh per year along the Burntwood-Nelson system is still the same amount of energy under the present diversion scheme. The water is the same; the energy produced from it is the same.

MR. LYON: And the annual gross revenue . . .

MR. BATEMAN: The annual gross revenue is entirely something that our engineers who were doing this felt that we couldn't be optimistic enough to put a cent per kWh on it, at that time, and we left it out. That's the explanation for why the dollar figure was not mentioned in the final copy of the report.

MR. LYON: So you're saying that the paragraphs that I have read to you from the draft report did or did not appear in the final report of the task force.

MR. BATEMAN: The energy appears in the final report but the assumed value per kWh does not appear in the final report.

MR. LYON: I see. Could you read to us, Mr. Bateman, from your copy of the final report how those two . . .

MR. BATEMAN: No, I couldn't. I could take the time to dig that out but we made a great number of editorial revisions. When we wrote this draft report we were not as careful with the Queen's English and we improved it considerably but I could perhaps dig out the copy that went to the typist, which would have the markings on it. That should be available somewhere. But this figure of 14.38 billion kWh is a figure that you'll find in tabular form and also on some of the charts. In fact, on Figure 14 in the final copy of the report, if you look at Figure 14 in the final copy of the report you'll find that the actual energy all along the diversion route including that on the Nelson is 14.38 times 10 to the 9th kWh.

MR. LYON: Without a dollar figure being expressed.

MR. BATEMAN: Well as I explained to you, Mr. Lyon, we did not think it prudent to assign a one cent per kWh because energy costs at that time were lower. But I can assure you, the energy in the final report which I'm reading from here is exactly the same as the energy in the draft report, the point being that the 30,000 c.f.s. that we're going to divert from the Churchill system into the Nelson system will produce energy at each of the plants as it is developed and the important point about putting a dollar or cent figure on it, you don't realize that dollar or cent figure until you actually spend the money to build the plants to produce the energy. So we haven't lost anything in leaving that figure out. It's a hypothetical figure; we haven't lost anything by leaving it out; we don't get that energy until we actually spend the money to build the plants to capture the energy.

MR. LYON: But in fact, Mr. Bateman, we already have one plant in place; namely the Kettle Plant.

MR. BATEMAN: And we'll shortly have the Long Spruce Plant in place and both those plants will benefit materially from the energy produced by Churchill River Diversion water. This summer, next winter and forever.

MR. LYON: Mr. Bateman, had Hydro followed the 1970 study sequence it would have had the Wuskwatim Plant in place on the diversion route, itself, would it not?

MR. BATEMAN: No, we wouldn't have had the Wuskwatim Plant in place. I think Mr. Goodwin explained to you today the cost of that site and the flooding, on the basis of the preliminary engineering information that was available in 1970 or whenever it was, 1969, it indicated the relative magnitude of costs for that plant. But our actual field experience on building these things, our actual field experience on arriving at the additional engineering information, there were no reasonable elevations surveyed in the area of Wuskwatim, the amount of flooded land. I'm not so sure that we'll

get a licence, even now, on the original scheme. That's why we're re-examining the various sites along the Burntwood River to get a more reasonable handle on the method of developing those resources with a minimum cost to the environment.

MR. LYON: Now you say, Mr. Bateman, that the figure one cent per kWh that was used to arrive at the $148 million annual revenue figure, you say that that is not an accurate figure at the present time. Was it accurate in July of 1970?

MR. BATEMAN: No, it wasn't. That's why it was left out of the final report.

MR. LYON: Why was it not accurate then?

MR. BATEMAN: Well because it was purely a hypothetical estimate.

MR. LYON: What would your estimate be of the value of that energy today?

MR. BATEMAN: Well, I would value it higher today.

MR. LYON: Considerably higher.

MR. BATEMAN: Yes.

MR. LYON: Two cents?

MR. BATEMAN: Well, yes, I think two cents would be a reasonable value to put on it and as time goes on it will be more valuable yet.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Could you not apply the same reasoning in upgrading the value imputed to the energy output of Jenpeg?

MR. BATEMAN: Oh yes, decidedly, the energy output from Kettle Rapids is going to be more valuable. If we had put a cent a kWh on that value back in 1970 it would have been 600 and some odd million dollars. But in matter of fact, today's value is higher than that. But that doesn't prove that we should have put it in the report when we weren't sure of the figure. I think the significance attached to the omission of the hypothetical dollar value is over-emphasized.

MR. LYON: Wel, Mr. Bateman, you're talking about a figure of, say, and I understand that that figure $148 million should really be $143 million, if it's worked out. I don't know . . .

MR. BATEMAN: You're absolutely right. There is an error. The typist has transcribed two figures.

MR. LYON: You're saying now that the value of that energy today would be — and it's an estimate — would be two cents. So that raises us up to just under $300 million revenue annually and you're saying that this is not something of importance.

MR. BATEMAN: Well, yes, it is important, but it is not there. That energy is not there yet, Mr. Lyon. That energy will not be there — the 143 billion kWh will not be there until all of the Nelson River has been developed and all of the Burntwood River Plants have been developed. So why put a cent a kWh on it then when it may be more in the future. We thought it would be relatively unimportant to try and attach a hypothetical dollar value to something that is so far out in the future. What this was talking about was twenty years in the future. Now, surely . . .

MR. LYON: . . . all the Nelson sites?

MR. BATEMAN: For all the Nelson sites.

MR. LYON: But let's get it down, Mr. Bateman, to dealing with plants in place. That goes back to the questions I asked you this morning; the value of 30,000 c.f.s. passing through the Kettle Plant which was in place. How much energy revenue has been foregone because the CRD was not built when it was scheduled to be built? Is that not a crucial question?

MR. BATEMAN: Only since last fall have we been short; only since last fall could we have used more energy in the system. Don't forget we didn't build the second U.S. tie until 1976, November 10th was when it went into service, and if we had had the Churchill River Diversion and an abundance of flow we would have been able to export. If we had had the Churchill River Diversion we'd have been able to slack off some of our generation or some of our purchases but we would have still been in a critical energy position last winter with both Churchill River Diversion and Lake Winnipeg, as I have told you.

The importance of this Churchill River Diversion water is for the future. Now the only increased cost by not having it was in the period from August last year to the present time and the reason for that is that the average flow in the Nelson River was sufficient to provide all that we could use in Manitoba. It provided all that we could export to Ontario and to the U.S. into the markets that were available to us.

So we haven't wasted any energy or water by not having the Churchill River Diversion available earlier, except for the period August of last year to the present time.

MR. LYON: And that, of course, is the rock upon which your ship and mine are going to founder and disagree. As you talked the other day, Mr. Bateman, about hindsight you're talking in terms of questions that are being posed, the criticisms that are being made of the government and of Manitoba Hydro with respect to hindsight. But isn't it a fact that within Manitoba Hydro, itself, from the day of the Cass-Beggs Report, September 9, 1969, there was a considerable engineering argument as to the fundamental change in the sequential development that Mr. Cass-Beggs recommended which subsequently became the policy of Manitoba Hydro dictated, I suggest to you,

not internally from Hydro but externally from the government and from Mr. Cass-Beggs.

MR. BATEMAN: Well I don't agree with you, Mr. Lyon. Your intimate knowledge of what, apparently, went on in Manitoba Hydro is not borne out by the documents that Manitoba Hydro has produced and they will stand up in the engineering fraternity without any such allegations as you are making. I think the integrity of the engineers that produced those documents is also beyond question. I think they have been satisfied in the profession that the review by the Council of the Association — just as if you were malpracticing law you might be asked to appear before a judiciary or some committe of the legal profession, so were the allegations made against Hydro engineers. It was felt that they, themselves, wanted to clear the air and appeared before the Council of the Association of Professional Engineers to review completely the work that was done and the professional integrity of those people. I am quite confident that they are satisfied that what they were doing was right.

MR. LYON: Mr. Bateman, let's get this clear for the record. I am not attacking the integrity of the engineers of Manitoba Hydro. I accept your statement as to their integrity. The difference between you and me, and the difference between the government and the opposition on this matter, is not the question of the integrity of Manitoba Hydro's engineers. That, with respect, Sir, is a red herring. The difference is that there was imposed upon Manitoba Hydro a sequential change of fundamental proportions in the development of the Churchill-Nelson system which has cost the taxpayers of this province hundreds of millions of dollars. That's the difference. It's not the integrity. I haven't finished the question yet, Mr. Chairman. —(Interjection)—

MR. CHAIRMAN: Mr. Premier, on a point of order.

MR. SCHREYER: I didn't hear a question; that's my point of order.

MR. LYON: So if you wait, you will.

MR. SCHREYER: Well, how long do I have to wait?

MR. LYON: Just as long as I take . . .

MR. SCHREYER: No, I don't think so.

MR. LYON: Just as long as I take to formulate it.

MR. SCHREYER: No, I don't think so.

MR. CHAIRMAN: Order please. Mr. Lyon, if you wish to get into a debate, I am sure you have, as I have indicated before, many opportunities in which to debate on your particular issue. I don't think that you should be trying to get into a debate with the chairman of Manitoba Hydro on a matter which is a matter of policy. If you wish to argue your point, you have the opportunity in many ways to bring that matter up in the House and debate it in the place where the debate belongs. Mr. Lyon, proceed with your questions.

MR. LYON: Assuming the preamble that I have just given you, Mr. Bateman, —(Interjection)— we don't need any help from the comic relief benches on the side here.

MR. CHAIRMAN: Yes, I would ask for order please. Continue, Mr. Lyon. Mr. Johannson, Mr. Lyon is asking questions. Mr. Lyon, proceed.

MR. LYON: I suggest to you, Mr. Bateman, that there was considerable internal discussion and debate about the validity of the course that was being imposed on Manitoba Hydro to the point where the task force report itself did not contain any recommendations. Is that not a fact, Mr. Bateman?

MR. CHAIRMAN: Mr. Johannson on a point of order.

MR. JOHANNSON: He is not presenting questions; he is presenting arguments and trying to brow-beat the chairman of Hydro.

MR. LYON: Not at all, Mr. Chairman, on the point of order, if indeed it is one, is much more capable than the Honourable the Member from wherever, of looking after himself and of answering questions with integrity and with honesty and with clarity. I don't think the chairman of Manitoba Hydro needs any help from the penny seats across the way.

MR. CHAIRMAN: Thank you, Mr. Lyon. On your point of order, I don't see the relevance of that point of order either. Would you proceed with your questions?

MR. LYON: Was that not the case, that the task force report did not contain any recommendations, and was that not a reflection of the fact that there was considerable internal engineering concern about the validity of the course that was being laid down by Mr. Cass-Beggs and the government?

MR. BATEMAN: No, I think that the engineers who made this report, and this was my own personal recommendation to them, that they not make recommendations because this is a matter that the Board of Manitoba Hydro was going to have to consider. And the board of Manitoba Hydro normally makes the recommendations. It is not customary to make recommendations in this will report. You have to review this report to see that there are lots of conclusions in the report, the engineering conclusions relative to what is good and what is bad, and this development program that is in the task force report does clearly indicate that the course of development that Manitoba Hydro is embarked upon with the Lake Winnipeg Regulation, and Churchill River Diversion, is economically comparable to any that we could have pursued

MR. LYON: That is, Mr. Bateman, subject to the constraints that you were acting upon brought to bear upon Hydro by the government and by Mr. Cass-Beggs.

MR. BATEMAN: No, I will disagree with you, Mr. Lyon. The constraints, as I explained to you at an earlier committee meeting, the constraints that Manitoba Hydro had to face were those that related specifically to the environment. We were asked to incorporate in the cost evaluations the cost of clearing, the cost of flooded land and those other resource values that were part of a very comprehensive report by Underwood-McClellan as to the value of resources. We took those bits of information and put them into our studies and we came out to a recommendation, or a conclusion if you like, that the elevation of South Indian Lake, once you got above 850, the cost of the resource damage was far greater than the benefits derived from the power from it.

MR. LYON: Surely, Mr. Bateman, you are not saying there was no internal dissension at all at Manitoba Hydro.

MR. BATEMAN: I am telling you, Mr. Lyon, that there was no internal dissension in the task force other than what you would normally expect among a group of engineers who are arguing various points for clarity.

MR. LYON: How do you explain then, in the light of that statement which I am very surprised to hear from you, how do you explain the resignation of the assistant general manager, Mr. Kristjanson?

MR. BATEMAN: He was not a member of the task force.

MR. LYON: He wasn't a member of the task force, no; but he was a senior member of Manitoba Hydro's staff.

MR. BATEMAN: I don't intend to explain his resignation, Mr. Lyon. You know Mr. Kristjanson very well and I am sure he can give you an explanation for his resignation better than I.

MR. LYON: Mr. Bateman, let me maybe refresh your memory by reading part of the letter of resignation of Mr. Kristjanson sent to the chairman of Manitoba Hydro, who was then Mr. Cass-Beggs, back in 1971 when he resigned. He said that, and this is a partial quote, his main reason for resignation was that the statutory objectives are "no longer pursued at Manitoba Hydro." believe the change to be the result of your attitude as chairman. As I see it, you are unwilling or unable to view objectively the relative factors involved in providing for the future power requirements of Manitoba or to present them for full discussion to the members of the Manitoba Hydro-Electric Board."

And continuing the quote, "Your recommendation that this utility proceed with the regulation of Lake Winnipeg before the diversion of the Churchill River is a case in point. The course being pursued will impose many millions of dollars of extra costs on the power users of this province over a period of years. In such circumstances I can see no possibility of maintaining the high level of integrity that has in the past characterized Manitoba Hydro in its dealings with its staff, its customers, and the general public."

Now surely that was a statement, Mr. Bateman, that would indicate that there was some dissension at Manitoba Hydro by one senior member of the staff, an assistant general manager, with respect to the course that the chairman was following.

MR. BATEMAN: That letter, Mr. Lyon, was published, I believe, in the papers after it was submitted and I believe it was submitted and not acted upon for several weeks, or at least several days anyway, ten days or more. The date of that letter and the date of his public resignation are a matter of record and I have no comment to make upon it.

MR. LYON: The fact is, Mr. Bateman, is it not, that attempts were made by the chairman and others to try to get Mr. Kristjanson to change his mind but he stood to his ground and let his resignation go through because he would not be a party to the policy that Mr. Cass-Beggs was imposing upon Manitoba Hydro and its engineers.

MR. BATEMAN: I disagree, Mr. Lyon. The chairman of that day, Mr. Cass-Beggs, was not imposing his will upon the engineers of Manitoba Hydro. You yourself have told us that the integrity of Manitoba Hydro's engineers and my own integrity is not in question. Now surely you can't say that and then tell me that I bowed to somebody's will. We did an engineering job. It has got to be one way or the other. Either you are questioning my integrity or you are accepting . . . . I just can't see it, Mr. Lyon.

MR. LYON: How do you explain, Mr. Bateman, the resignation of Mr. Douglas Campbell from the board of Manitoba Hydro on precisely the same point and still try to tell us that there was no dissension within Manitoba Hydro about this policy?

MR. SCHREYER: Can I ask ? a supplementary question

MR. LYON: Well, let the question be answered first.

MR. SCHREYER: I think a supplementary to ask Mr. Bateman if he can explain why Tom Storey, Dean Hoogstraten, W. J. Parker did not resign. I think it would be equally possible or impossible for Mr. Bateman to answer that question at the same time. I am not suggesting that their integrity is at issue either, neither Dean Hoogstraten or Tom Storey or Bill Parker.

MR. BATEMAN: The point is, Mr. Lyon, that I was not at the board meeting. I was not one of the staff in attendance at board meetings and I think you could ask the board member who resigned what the difference of opinion was.

MR. LYON: Well, Mr. Bateman, with respect, I think we got into this bit of an argument because you try to make the case that there was no dissension in Manitoba Hydro with respect to this course

of policy and this fundamental change in policy that was being pursued when in fact historically, and that is why I said I was refreshing your memory, historically that is not the fact. An assistant general manager resigned. A respected director of Manitoba Hydro appointed at the behest of the present Premier of Manitoba, a layman who has had more experience in Hydro matters in this province than perhaps any other layman in the history of this province resigns, and you are trying to suggest that that did not mirror or manifest some dissension within Manitoba Hydro?

MR. CHAIRMAN: Mr. Premier on a point of order.

MR. SCHREYER: I think the record will show, Mr. Chairman, that the question asked initially was with respect to the engineering component that served on the task force and Mr. Bateman was addressing himself to that question.

MR. LYON: No, I was talking about Manitoba Hydro itself, not the task force. We can read the task force report.

MR. BATEMAN: I think, Mr. Lyon, you did indicate that because there were no recommendations in the task force, that you were implying that the engineers were under some cloud or there was some dissension in the ranks and I want to make it perfectly clear that there was no dissension in the ranks of the task force. As a matter of fact they feel very strongly about the work that they did as being of the highest quality professionally. They resent being accused of this cloud of dissension that somebody is trying to create over their heads. They have no concern, if you like, about the way the work they have done is treated by the board. That is a policy matter that the board itself has to take responsibility for and the board of Manitoba Hydro of that day did take responsibility for the decisions that were made, albeit one of the members of the board resigned, but that meant that there were still six members on the board that didn't resign.

MR. LYON: But you yourself, Mr. Bateman, the other day in a moment of what can only be described as pristine candour allowed as how yourself, that you would have preferred, in light of hindsight, if the licence had been issued and the CRD had gone ahead.

MR. BATEMAN: I think we can check the record exactly what I did say, but it wasn't construed that it would have solved all of our problems. It would have perhaps avoided the sort of rehash, if you like, that we have been going through at each of these committee meetings each year. And it doesn't add to the productivity of Manitoba Hydro to continue to argue about what was done. I think I explained very properly to the committee, Mr. Chairman, that what has been done is done. Now you can argue about whether it was right or wrong. I tell you . . .

MR. LYON: Precisely. And we will continue to, don't worry.

MR. BATEMAN: . . . Mr. Lyon, that what we have done is in the best interests of the citizens of Manitoba. It has maintained the power supply to the citizens of Manitoba, whereas if we had not had what we have in place this last year, we would not have been able to meet those requirements last winter. I suggest to you with all candour that it would be much better and much better in the interests of the citizens of Manitoba if we spent more time about looking at the future of Manitoba Hydro and instead of always, in Manitoba as the price of public power we seem to have great delight in tearing each other apart about how or why it should have been developed.

And you know this isn't new, Mr. Lyon; this controversy that surrounds this choice of South Indian Lake or Lake Winnipeg first or Churchill River diversion first isn't really new in the power field. Heavens, you can go back to the time when City Hydro was first created, back in 1906. The record of reading then is really priceless, the tremendous discussions that went on, the creation of the Manitoba Power Commission in 1919 under Sir Rodmond Roblin created a situation where he proposed that. Now surely this isn't new. The Seven Sisters lease in 1928, these were gigantic struggles between the various views of the political group that were responsible for making those decisions. But all of those things were done. They have all enhanced the value of power to Manitobans. And I would wager that after this situation subsides that the present development of the Nelson River which was envisioned in that programming board report would also make sure that we have an assured supply for the future.

MR. LYON: One item that you overlooked, Mr. Bateman, that is also gargantuan, p.f.s. is the cost benefit of what 30,000 from the CRD could have done for Manitoba Hydro users in this decade had it been put in place. That is gargantuan and that is why the argument will continue, I suggest with respect.

MR. BATEMAN: With all due respect, Mr. Lyon, I referred to the situation this morning. I have tried to make it clear to you that the addition of Churchill River diversion water this year would have been valuable from last August only. Prior to that we had no outlet for the energy that could have been generated by it and we were in a very surplus position because, as you know, the resources of this province were very wet. We were in ' an extremely wet cycle. Now that we have fortunately got the Lake Winnipeg Regulation work in place and the Churchill River Diversion available for use, we will be able to improve our position next winter. As a matter of fact next winter, even if the drought continues, we will be better off hydraulically than we were this last year.

MR. LYON: Mr. Bateman, one final question on the matter of hindsight. I think it is clear to you that

I and many others dispute with you that there is any question of hindsight because I suggest with respect that the course that was imposed upon Manitoba Hydro by Mr. Cass-Beggs and by the present government was a course of action that was disputed from Day One, internally, within Manitoba Hydro, by members on the board, by the assistant general manager, and by others within Manitoba Hydro. And further to that, further to the resignations, that public statements were made all through the course of these proceedings when this disastrous course was agreed upon by the board of Manitoba Hydro. Public statements were made, warnings were issued, that millions of dollars were going to be lost. Indeed I just read the words from Mr. Kristjanson to you. I made a statement in 1972 as a private citizen to the water commission that was then considering Lake Winnipeg Regulation, and the figures are wrong, I admit it, but I will read you the two paragraphs that were made on the 17th of February, 1972, over five years ago, and ask you whether or not this is hindsight. "It is also clear to me that if Manitoba Hydro were to proceed with the construction of the modified diversion on the Churchill River, it would not be necessary to have Lake Winnipeg Regulation. Conversely, if Manitoba Hydro proceeds according to its present intentions to regulate Lake Winnipeg, it must also construct a Churchill River diversion in any case. The advantages of the modified Churchill River diversion, it seems to me, are self-evident. Almost $500 million worth of generating plant and transmission line is in place, anticipating a final expenditure of only" — and remember these words — "of only $31 million" — which is what it would have taken to finish the CRD — "on the Churchill diversion, which will make the original investment more economic and feasible. Three valuable years have already been lost while futile studies have been undertaken seemingly to prove the impossible. In the meantime, Hydro's capital investment of $500 million cannot perform at fully efficient levels until the diversion of the Churchill River takes place."

MR. CHAIRMAN: Mr. Lyon, you are quoting your own opinion expressed at a meeting where?

MR. LYON: A Brief to the Manitoba Water Commission delivered February 17, 1972.

MR. GREEN: Your quote is out of order as admitted by yourself. If you look at your first words, quote your first words, "Everything I say will be out of order." That's how you started your speech.

MR. LYON: Mr. Chairman, if I said it, I said it with respect to a procedural. . . not the content of what I was saying. And I'm merely asking Mr. —(Interjection)— quoting my own words back in 1972, and suggesting to Mr. Bateman that his comment about hindsight, does it have the same application when you consider that these warnings were made along every foot of the course to the Premier, to the then Chairman of the Manitoba Hydro and to public bodies.

MR. BATEMAN: Mr. Chairman, for a brief comment for what it's worth. I think hindsight has indicated to me that your estimates were out by an order of magnitude on the costs and that's hindsight. But at that time we had no . . .

MR. LYON: I indicate, Mr. Bateman, I was talking about Lake Winnipeg Regulation at $50 million to $100 million. I would suggest that your Estimates, at that time, were out by a considerable . . .

MR. BATEMAN: I'm not denying that, Mr. Lyon. I've kept this Committee apprised each year of the change in estimates of these projects in great detail. That's what I feel I'm here for. I don't think, with all due respect, Sir, that the system as you had proposed it, to rely entirely on the Churchill River Diversion, would have given the citizens of Winnipeg a firm power supply last winter. And then there would have been, perhaps, even a more angry Committee meeting than the one I face today.

MR. LYON: Mr. Chairman, you suggested the other day that Manitoba Hydro was saying there was going to be a shortage of power in 1973-74, and that's why Lake Winnipeg had to be proceeded with immediately and that shortage did not develop either, did it, Mr. Chairman. Because Lake Winnipeg wasn't ready in 1973-74.

MR. BATEMAN: You're right and we didn't have the shortage. But not because we didn't have Lake Winnipeg. It was because of an act of God that we had lots of water in the rivers flowing into Lake Winnipeg.

MR. LYON: And you didn't have the 30,000 c.f.s. that you could have had through the CRD.

MR. BATEMAN: Which wouldn't have been any use to us.

MR. LYON: Oh, I see. I leave you at that point, Mr. Bateman.

MR. CHAIRMAN: Mr. Premier, do you have a question on the same matter?

MR. SCHREYER: Yes, a supplementary. If we're pursuing pristine candour, which I hope and trust we always are . . .

MR. CHAIRMAN: Just following the same procedure as established in the first meeting.

MR. SCHREYER: Fine. I'd like to ask once again if it is not the fact that the reason why there were not problems with respect to energy supply in the period '73, '74, '75 and the first half of '76 was because there were extremely, or certainly much above average high water and high water flow conditions prevailing in the Nelson River watershed? Is that not fundamental?

MR. BATEMAN: That's fundamentally correct. I think the record will show, Mr. Chairman, that the level of Lake Winnipeg in 1974 was an all-time high elevation.

MR. SCHREYER: That being the case, would it not also be correct that any attempt to impute a simplistic mathematical calculation as to the value of CRD in the period, say, when it could have theoretically been completed which would be approximately late 1972, I assume, to August of 1976,

has to be discounted by the amount of availability of above average flows on the Nelson.

MR. BATEMAN: Yes.

MR. SCHREYER: My next point then, Mr. Chairman, would be to ask if it is not correct that if one insists on asserting that there was a basic change in the sequence of development, that it would not have been the first, but indeed the second change, because, Mr. Bateman, is it not correct that in the days leading up to and during and immediately after the Programming Board Report, that there was an assumption that when the Hydro system load was in the order of magnitude of eight billion kWh, that that would be the point in time to trigger or activate works towards the regulation of Lake Winnipeg.

MR. BATEMAN: Yes that is correct, Mr. Premier.

MR. SCHREYER: Why was that dropped as an assumption, and by whom? And if I may use the word with about as much relevance as Mr. Lyon, who imposed that change?

MR. BATEMAN: Well, that change, if it was imposed was based upon the fact that load growth had not materialized as rapidly. As my memory serves me, the projections at six percent in the Programming Board report, and I think continuing on into 1967-1968 when this particular question was being raised about the timing on Lake Winnipeg, the then Chairman of Manitoba Hydro, the late Mr. Fallis wrote to the Manitoba Water Commission indicating that Lake Winnipeg could be deferred until 1978.

MR. ENNS: Hardly an imposition, Mr. Premier.

MR. SCHREYER: Well, about as much of an imposition as the latter route was. —(Interjection)—

Well, can we pursue that a little bit. My understanding is that the reason why the time frame 1978, approximately 1978, was talked about in those years, because it was projected that the load system would be at about eight billion kilowatts around 1978. In fact, when did the Manitoba Hydro load reach the eight billion kilowatt level? 1977 or 1973?

MR. BATEMAN: In 1970-1971, the Manitoba firm load was 8.3 billion kWh, which, if you look at the Programming Board report, in order to make a firm supply of power available to that system, both those systems had to be in place.

MR. SCHREYER: What . . . the Programming Board report?

MR. BATEMAN: Well, if we look at the tables, Mr. Premier. First of all' these are summaries of sequences of development, the all-thermal sequence being the first table, and then subsequent tables deal with different sequences of development of the system that was needed to supply the Manitoba firm load. They indicated that in this table that I'm looking at, Appendix 3, that in 1975-76, the load was 8.8 billion and the Lake Winnipeg came in the following year, 1976-1977, with the Churchill River Diversion having been in place by 1971-1972. There is a subsequent table here where we add some load to the Manitoba system by exporting some power to the United States market that was studied at this time, 800 megawatts—Appendix No. 4 - 800 megawatts of export to Minneapolis. In 1971, it required both Lake Winnipeg Regulation and the Churchill River Diversion to be in place to meet the Manitoba load plus that export load.

MR. LYON: What year was that again?

MR. BATEMAN: That was 1970-1971, that both Lake Winnipeg Regulation and Churchill River Diversion would have to be in place to supply the estimated Manitoba load plus the 800 megawatts of export.

The 800 megawatts of export had an energy content of roughly 5.9 billion kWh by the end of 1972-1973. It built up during 1971 and then continued, in 1973-1974, it had built to 6.4 billion kWh. But it required, to do that, not only the installation of Kettle and the Churchill River Diversion, and Lake Winnipeg Regulation, but the installation of the Long Spruce Plant had to be in place to provide enough energy to meet the export condition. So you then had a load, on the Manitoba system, including export, of about 13 billion kWh. Now that 13 billion kWh happens to be the load that Manitoba Hydro — we are at 12.0 billion kWh this current year, indicating that in order to supply that type of firm load you either have to have all of these in place, or you have to get the energy from some place else. Now, fortunately, we haven't got the Long Spruce in place yet, but we will have for next winter, the first two or three units of it. And we have got both Churchill River Diversion and Lake Winnipeg in for next year. And that's only meeting the loads that were in the Programming Board's study report.

This series of studies done by the engineering team that produced this Programming Board Report which was the basis on which all of the Nelson River development took place' I think, is fundamentally, as sound an engineering study today as it was then.

MR. SCHREYER: Mr. Chairman, if it was as sound an engineering study, and I'm restricting myself to engineering studies, not on opinions of others, then why was the one of the basic premises of the Programming Board Report set aside? Normally, I wouldn't use the word "imposed" but in that same context as it was used before, why was the change imposed? Because after all, does this Report not recommend that when the system load reaches the order of magnitude of 8 billion kWh, that Lake Winnipeg Regulation should be in place or well under way.

MR. BATEMAN: The report indicates that 9 billion kWh negative, Mr. Chairman, that the Lake

Winnipeg Regulation would be required.

MR. SCHREYER: At nine billion?

MR. BATEMAN: At nine billion. It was 8.8. But it was the time factor at which you would reach that level of load on the Manitoba system that dictated the deferral by Manitoba Hydro of Lake Winnipeg Regulation. We didn't think we'd get there that soon, because we didn't have any export. The export market crumbled away. We couldn't meet the costs.

MR. SCHREYER: Would it be correct to say, Mr. Bateman, that the Crippen Consulting Engineers report is basically compatible with and supportive of the main premises of this report, or are they in contradiction.

MR. BATEMAN: Well, if you're referring to the earlier Crippen Reports, they made up part of the engineering studies that went into the report you refer to, the Programming Board Report. Now the subsequent Crippen Report that was done in 1970, I would find that there'd be no disagreement with that. Basically, the terms of reference under which they studied that Lake Winnipeg again, was to look at it and they did that in conjunction with the growth on the Manitoba Hydro system. So consequently, the timing of the requirement of Lake Winnipeg and Churchill River Diversion were both reviewed by the systems study group that were working within Manitoba Hydro in conjunction with the Crippen engineers.

MR. SCHREYER: So then, Mr. Chairman, be that as it may if the Crippen consulting group, the Nelson River investigation engineering group, consistently, one to the other, spoke in terms of there being value to Lake Winnipeg Regulation for power purposes, and more specifically, they seem to tie it to a threshold of 8.8 or nine billion kWh, given the fact that there was some difference as between the estimates of when that would be reached in fact, but put that aside, the fact when it was reached, why the change of opinion that seems to loom so largely in some people's mind, that not notwithstanding this report and the Crippen Report, the nine billion kWh threshold, that all this should be set aside and there should be no Lake Winnipeg Regulation. How does that come about? And was that imposed by somebody or someone? If so, by whom? Any more or any less so, than the subsequent course of events.

MR. BATEMAN: It wasn't a case of being imposed, Mr. Chairman, it was a case of the rate of growth on the Manitoba Hydro system being such that it was not felt necessary to have Lake Winnipeg as early as was contemplated in the Programming Board Report. I guess that's basically what it was.

MR. SCHREYER: Not as early, Mr. Chairman, but by the time the system reached nine billion, whenever that would be.

MR. BATEMAN: I think Mr. Chairman, we could answer the Premier's question by saying that there was never any question but, what, in order to develop the resources with optimum consideration of the value of the hydraulic resources, then ultimately Lake Winnipeg Regulation had to be proceeded with because that's a key part of the overall Nelson River development. You have to be able to regulate the flow of the Nelson to give you the energy from that Nelson River water coming out of Lake Winnipeg when it is most valuable in the system. And that's in the wintertime. And that's why in my opinion, there was never any question about when, or whether Lake Winnipeg would be done, but just a question of when it would be done.

MR. SCHREYER: Well, we've gone over that many times. I certainly think it's important that note be taken, that there was more than just a concept. There's was a relatively specific threshold attached to it—is it not correct—of 8.8, say nine billion kWh, which was reached, I gather, some three years, without exaggerating, four years before the earlier projections.

MR. BATEMAN: Yes.

MR. CHAIRMAN: Mr. Enns? Mr. Lyon.

MR. LYON: I was just following through on what the Premier was asking. You were talking about the Crippen Report of 1970, but, as we know, Mr. Bateman, you also have the Underwood-McLellan Report of 1970 which suggested to you a development sequence, a 1970 study sequence, for the construction of the CRD, medium level, 30,000 c.f.s. to start through, or to be diverted into the Nelson River. And I'm going from memory—I don't have the report in front of me—but my recollection is that their recommendation equally in 1970, was that Lake Winnipeg Regulation could be postponed until 1993 or later. Is that not correct?

MR. BATEMAN: Well, they may have said that in their report. But that is not proper to take that just without the qualifications that surround the other points of that report, because they indicate very clearly that the recommendations — that's only one solution and there are many solutions. I have some notes here somewhere on this report, including a number of supplementary pieces of paper in it, but I think the important thing is that because of the nature of that study it was not acceptable to Manitoba Hydro.

MR. LYON: Well, to whom at Manitoba Hydro?

MR. BATEMAN: The senior engineers of Manitoba Hydro. We were taking this information that was produced by the same firm, Underwood-McLellan, and the Crippen Report, and integrating it

with the system studies with a technique that was recognized by us as being workable, whereas the technique used in the systems study portion of the report done by Underwood-McLellan did not follow a technique that we had confidence in, and they themselves tell you in the report that they haven't got that much confidence in it either.

MR. LYON: Just on that point, is this back to the old bone of linear programming and so on?

MR. BATEMAN: That is part of it but I suggest to you, Mr. Lyon, that linear programming is a technique that is new in this area, but not new in itself. But the linear programming approach consisted of a simplified mathematical model of a hydro thermal system including, and objective function, to be maximized, and I am quoting from there report now, "and sets of constraints describing the continuity of water flows," and those are called continuity constraints, "requirments to meet the forecasted energy and capacity growth," which are called the production constraints, "and the need to provide new facilities to generate energy," and they are capability constraints.

Now in dealing with this they found that the computer would not digest the information that was fed to it and consequently they had to compress the data that was given to the computer to six-month blocks of information, and then they had to pick a small period of time, not the twenty-year period. And the recommendations of this report are not supported by that engineering information.

MR. LYON: But isn't it a fact, Mr. Bateman, as the report states, that the selected sequence was tested and was evaluated with the same program and in the manner used by Manitoba Hydro?

MR. BATEMAN: You know it is very interesting. We engaged a consulting firm to do an engineering study. They did a very good job of the other reports. This was a good job in itself, but unfortunately with the time available to pursue, we did not feel like spending the money to develop the competence of these people any further. We did not feel they had a program or a linear programming technique that would give us any competent information. Consequently, I think we were more than liberal, more than patient in our approach to this, I spent many hours talking to the people that were responsible for doing this work and it just boiled down to the fact that I think it was an attempt to try and develop something new and something good, but it didn't work. It is as simple as that.

MR. LYON: I suggest, Mr. Bateman, that the sequence that was selected was tested using Manitoba Hydro's existing system simulation program. Now you are trying to say that that was not valid.

MR. BATEMAN: After this failed, if you want to get the information correct, I will tell it to you correct, after they failed in reaching a solution by this technique that they had chosen to use, they then asked if they could run our simulation program that was developed by Manitoba Hydro. Now here we did, I think quite a great favour to this consulting firm by giving them our simulation program which we had spent many hundreds of thousands of dollars developing, to try and help them arrive at some sort of a solution to their study. Now the three cases of simulation that they ran on the computer, and each simulation case costs a significant number of dollars that Manitoba Hydro was putting up, we did not want to run any more because we were doing this internally by this time. We had to conclude that the three cases do not support the recommendations that are contained in this report, because we subsequently did many additional computer studies which produced the task force report.

MR. LYON: The sequence recommended by Underwood-McLellan shows a large cost saving through the period 1975 to 1987, over the sequence that was adopted and undertaken by Hydro. Isn't it a fact that two other sequences that were produced in that study showed savings still greater than the one that was undertaken by Hydro?

MR. BATEMAN: Yes, but they don't produce a system that will perform the way it has to perform to provide the energy during the Manitoba peak load period.

MR. LYON: I suggest, with respect if they that were not sequences that were in accord with the impositions and the constraints that were being laid down by the chairman taking instructions from the government. —(Interjection)— Well, read the report of September 9, 1969, Mr. Chairman. If the Premier is muttering away to himself, if he wants to reread Mr. Cass-Beggs report of September 9, 1969, and demonstrate to us how Hydro's planning since then has changed in any considerable iota, let him go to it.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Mr. Chairman, the fact is that Mr. Bateman has, in reply to the question, said three times, to my hearing, three times, that there was no imposing of external considerations on the senior engineering people of Manitoba Hydro and speaking very precisely for himself, disclaimed that very emphatically. In light of all that and after saying that he is not questioning the integrity of the engineering staff, Mr. Lyon proceeds to reiterate the same garbage.

MR. LYON: Where does the figure 850 feet come from them?

MR. SCHREYER: Not to mention Messrs. Tom Storey, and Hoogstraten and Bill Parker or Mr. Campbell. Well, so there is a *bona fide* difference of opinion. Don't say that there is an imposition.

MR. LYON: Well, then why get mad about it?

MR. SCHREYER: Don't say there is an imposition of some extraneous will.

MR. LYON: How did it come about then? Where did the 850 feet on Southern Indian Lake come from? Was that pulled out of the air?

MR. BATEMAN: No, we can show how the resource values out of the Underwood study produced a zero or a minimum cost figure at the 850 elevation and those are well documented. But the point that you are making about this Underwood-McLellan study, you haven't told the Committee that one of the assumptions made also was that — and I am going to quote from it — "the maximum diversion capacity of either the Sturgeon Weir, or the Burntwood Diversion must be determined by examinations of operations on a shorter time-scale than six-month seasons used by the mathematical model. This implies that the mathematical model must have used estimated diversion costs without knowledge of maximum discharge which affects these costs. In comparing the sequence U-2 to sequences that were selected by Manitoba Hydro for the Lake Winnipeg Regulation studies done by E. Crippen and Associates, it becomes evident that U-2 is hardly inhibited by the high first-stage cost, low incremental costs, remobilization costs, engineering and construction work going on at many sites simultaneously in later years" and I could go on reading.

A MEMBER: What is U-2?

A MEMBER: We're flying very high in here.

MR. BATEMAN: Well, that is one of the sequences. But the point is that this report did contemplate a diversion through the Sturgeon Weir system into the Saskatchewan, in the Province of Saskatchewan, which province has found it objectionable to disturb the Churchill River with a dam below the confluence of the Reindeer and Churchill.

MR. LYON: That was one of the study options.

MR. BATEMAN: No, but that was one of the things that had to be done. If you read the recommendations of this report, it recommended Sturgeon Weir Diversion. And there would be some merit in having some Sturgeon Weir Diversion, but it just wasn't practical to accomplish it.

MR. LYON: Mr. Bateman, we were talking earlier about the task force draft report and the figures that were left out of the final report, the dollar figures which you say — I don't know if it was your term or the Premier's term — somebody said they were conjectural figures, although you now say that the values assigned to power could be double those that are shown in the figures.

I suggest to you that the task force, the engineers who were on the task force at that time, were dealing with, prior to these two paragraphs that we dealt with this morning which were excerpted from the final report, they were dealing with resource losses and gains and so on and then came the to two sentences which I have read and which were left out of the financial report. I suggest to you that the engineers on your staff wanted these two sentences. The members of the task force wanted to assure that these important facts concerning the Churchill River Diversion were put on the record. And somebody, I don't know whom, chose to leave them out. Who was it who left them out?

MR. BATEMAN: The final editing of the task force report was done by a group of engineers sitting around the table picking at it and being critical of each other's words and comments, and I couldn't tell you who asked to have them left out, but it was one of that group of task force engineers.

MR. LYON: And you say that the task force members concurred in that?

MR. BATEMAN: Of course they concurred in it.

MR. LYON: I see. The other day we were dealing with the comparison of development sequence costs, 1975 to 1987. Mr. Goodwin was here at the time talking about the 1970 study sequence and the current sequence, and then we referred to the annual capital retirement costs and the new components in millions of dollars. And Mr. Goodwin had dealt with the first table and the second table and had attached his reservations to them while saying, and I don't want to quote him out of context or misquote him, while saying that the figures were accurate subject to the conditions that he attached to the figures.

I was wondering if you, Mr. Chairman, or Mr. Goodwin could refer to the capital retirement cost new components millions of dollars, figures in the last three columns of that table, and give us your opinion on those, as to their accuracy or otherwise.

MR. BATEMAN: Would you like to try that Mr. Goodwin?

MR. CHAIRMAN: Mr. Goodwin. Mr. Premier.

MR. SCHREYER: Mr. Chairman, while that is being worked on I'd like to ask Mr. Bateman two more questions of a supplementary nature. The first would be whether it is not a fact that Underwood-McLellan, in the forwarding of their report, did in fact put what I think would be regarded as somewhat unusual, certain qualifiers with respect to their findings and recommendations.

MR. BATEMAN: Well, subsequent to receiving the report, I had a discussion with the senior people of Underwood-McLellan and it is interesting to make the observation, Mr. Premier, that the people who wrote this report, just during the latter stages of it, were in the process of leaving Underwood-McLellan to start their own business, their own consulting business, and consequently the responsibility for the report ceased to be theirs. Although their signatures are on the report they were not then working for a firm that was hired by us to produce the report, and my concern about the contents of the report were expressed to the senior people of Underwood-McLellan, and they subsequently had the report reviewed by other senior engineers and were then able to give us a pretty

substantial letter on the deficiencies of that report, which I have. But I did not want to make that public because I do not think it proper to criticize the work of another engineer.

MR. SCHREYER: Well, Mr. Chairman, I am not going to intrude onto matters that have to do with professional engineering code of ethics, as perceived by those in the profession. I hope and trust that it doesn't in any way materially impact upon what has been in fact the course of this development.

Be that as it may, the second question is that with respect to this rather much underlined estimate of capturable energy from Churchill River Diversion which has been estimated at 14.38 times ten to the ninth kilowatt hours, this is a figure, and can we get this straight for once, this is a figure which would be relevant with respect to all of the diverted flow going through all of the capturable head of the diversion route and the Nelson, that only when all projected power plant sites are developed and working that that quantum of 14 times ten to the ninth is in fact realized. Has anything been done which detracts or subtracts from the attainment of the 14 to ten to the ninth, when the Nelson River and its tributaries are harnessed?

MR. BATEMAN: On the basis of these . . .

MR. SCHREYER: . . . somehow been foreclosed?

MR. BATEMAN: No, on the basis of getting an average 30,000 c.f.s. out of the Diversion that is what we anticipate will be achieved in those Burntwood and Nelson River plants when they are developed, and nothing we have done, or nothing we were about to have done by some other scheme, would change the amount of energy that the Churchill River Diversion would produce, because it is the same water falling through the same distance. Providing there are turbines there to utilize it you will produce that energy.

MR. LYON: Well, you have done nothing, Mr. Bateman, except to delay it, by present historical record, at least five years from the earliest date at which it could have been completed, which was 1972, *ergo* the question as to what energy loss has taken place from Kettle, which was in place ready to receive those waters from 1971 onwards.

MR. BATEMAN: Well, I think, Mr. Lyon I made the point clear that we couldn't have used it, the licensing authority wouldn't have allowed us to divert that water down the Nelson River when the Nelson River was in flood. So we haven't lost any water, except as I have indicated to you, from the period August of 1976 to the present time when we could use more water in the Nelson River.

MR. LYON: But you have lost power and you have lost revenue.

MR. BATEMAN: The other point though I would like to make is that on the Burntwood River the development of a small head plant on the Burntwood River would have produced some energy from the 30,000, but in accordance with the sequence that we are developing with Long Spruce being the next available plant on the Nelson River, we will capture that water through that head, which is equivalent to most Burntwood River sites.

MR. SCHREYER: Mr. Bateman, a supplementary. Could we get some more precise quantification of this with respect to the last five years since that seems to be one of the points at issue. I suppose, in order to do this, you would have to ascertain what the mean monthly flows have been through Kettle under conditions such as they have been in the last five years. Now I would hazard to guess that some amount of that 30'000 c.f.s. would be relevant to the calculation but that for several months each year during high water flow years the 30,000 would be academic because it would merely be augmenting a flow that was already sufficient to spin the turbines of the Kettle Plant.

So, in asking for that I realize full well that to give a precise answer would require calculations more than can be done in a half hour or so. Do you think it's a reasonable request to ask that we ascertain the mean monthly flows of the past five years and then relate those to the flow requirements through the turbines at Kettle — and we're only talking about Kettle — so it would be some fraction of the 14 billion' and then some fraction further because of the fact that there have been natural high flows in the last five years.

MR. BATEMAN: I presume an attempt at that could be made. I don't know what value it would be except to show what Churchill River water would have produced had it been going down the . . .

MR. SCHREYER: Precisely . . . plants in the high water year. That's really all it would show but presumably . . .

MR. BATEMAN: But you'd have to also relate that to the load curve and it's no use having that water down the Nelson River at Kettle if the load curve wouldn't accept the load plus export. It wouldn't have accepted the load you were able to produce. You'd have been spilling it at Kettle.

MR. CHAIRMAN: Mr. Enns, a question on this matter.

MR. ENNS: On the same supplementary question, I am having some difficulty in following this which may not surprise people. Is what the Chairman telling us that there will always be times, when the high water levels prevail on the Nelson, that the CRD flows will in effect, be meaningless?

MR. BATEMAN: That is correct. There are times when you will not be permitted to divert water down the Burntwood River.

MR. ENNS: My second supplementary question, of course is, that's why there is sufficient storage capacity at South Indian Lake and its original concept becomes meaningful in the sense that if you can hold that water for those winter months that we want it, when we can use it and utilize it, that's

when we recapture the full values of the CRD flows.

MR. BATEMAN: No, I think though, Mr. Enns, you still wouldn't have sufficient storage capacity to offset the period of time if it was . . .

MR. ENNS: Just on that point, Mr. Chairman, I can appreciate what the Chairman is telling me but he will allow me that any added storage capacity at South Indian Lake enhances the value of the CRD flows to overcome this particular problem that we are discussing. That is during that period where augmentation of CRD water because it conflicts with high water on the Nelson cannot be fully, or doesn't add significantly to the system' any foot, two feet, three feet, four feet of additional impoundment over such a large reservoir as we have behind the Missi structure surely has to be considered as well.

MR. BATEMAN: Yes, it's putting it in perspective.

MR. ENNS: It's a hydraulic significance.

MR. BATEMAN: Yes, it's got hydraulic significance but putting it in its perspective, the range of operation of the reservoir that we had contemplated in the original high level diversion licence, I believe was eight feet; eight feet of draw on South Indian Lake which would have been very discouraging from the environmental point of view. We probably would have had lots of objections to that. The present draw we're contemplating is three feet or maybe a bit higher than that. But the point is that you would never likely be at the bottom of your storage range when you had the high flow on the Nelson and you may have been able to put one or two, or maybe even three feet of water into South Indian Lake during a time when you had to shut off the flow because the Nelson was in flood. But the significance of South Indian Lake storage at about 160,000 second foot months' and that means if it's 160'000 second foot months you could take 40,000 for four months, you see. That's out of the storage plus the natural flow of the river. Now compare that to Lake Winnipeg where you've got 400,000 second foot months. So you could take 100,000 second foot for four months which is a much more valuable piece of storage.

In other words, you can get far more value out of Lake Winnipeg storage into the Nelson River than you can out of South Indian Lake storage because it's almost four times as much storage and it operates over all the plants on the Nelson instead of just the lower Nelson.

MR. ENNS: But is it not true that with respect to Lake Winnipeg storage we're not adding one teacupful of new water to the system, whereas whatever waters we add from South Indian Lake storage is new water into the system?

MR. BATEMAN: That is quite true, but the important point about the new water versus the utilization of the water when you want to, if you didn't build Lake Winnipeg you would have to accept the energy production in the summertime when its value is less. And with the Lake Winnipeg control you can let that water out in the wintertime when the value of the energy, as we've proven this last winter, is probably as much as five times more valuable than it is in the summertime.

MR. CHAIRMAN: Mr. Lyon.

MR. LYON: Not to worry this point but you cast an implication, Mr. Bateman, upon the professional competence of one of the engineers who produced the 1970 Underwood McLellan Report. I understand that you have a letter from him asking for details of the allegations that have been made, and so on. I trust that you will be responding to that letter.

MR. BATEMAN: Well, Mr. Lyon, you know more than some people know because I think I'm the only one in our organization that knows about that letter so far. Maybe there are one or two others, I don't know, my secretary and whoever saw, but the letter indicated that last meeting I made allegations against his competence which is entirely erroneous. I made no such allegations. If my comments were construed that way I'd be glad to show him the Task Force Report, which he has seen anyway, which answers all the deficiences of his engineering report and I really don't think that I need to say any more.

MR. LYON: Then you're withdrawing any implication of lack of engineering skill on behalf of the engineer in question?

MR. BATEMAN: Look, I made it clear, Mr. Lyon, that when the Premier was asking me for a letter to indicate the competence of the engineering report that I have such a letter that I have not made public because I did not want to question the integrity or the engineering competence of any professional engineer. Now if you want me to table that letter, I will do so and it will be upon your request.

MR. LYON: I am saying to you, Mr. Bateman, that whether you table it or not, you are leaving the implication — and you have left it again — that there was incompetence with respect to the engineer in question. I merely asked you the question.

MR. BATEMAN: I am not questioning the competence of the engineer, Mr. Lyon. I am saying that the competence of the report or the contents of the report are subject to interpretation.

MR. CHAIRMAN: Mr. Premier on a point of order.

MR. SCHREYER: My point of order is that I am sure the record will show that about 15 or 20 minutes ago when I raised the matter, I raised it as follows: I asked whether the consulting firm itself

had issued to Mr. Bateman any kind of qualification or qualifiers with respect to the report and recommendations which were forwarded to Hydro , and in that context I had no way of knowing whether those modifications — or qualifiers rather — expressed by the consulting engineering firm were of a nature which reflected on competence of a person or whether they were of a nature which reflected on their own doubts as to the adequacy of given systems or methods of analysis. It is in that context that the question was put.

MR. BATEMAN: Well, Mr. Chairman, just to clarify the situation, I think the comments that the engineer you are discussing, Mr. Lyon, has made to the news media would indicate that perhaps there were some areas for honest disagreement in his proposals as compared to what Manitoba Hydro was pursuing. I also would suggest that if he wants to achieve or review the report that he wrote while he was in the employ of Underwood-McLellan with the senior officers of that company, that would be far more proper for him to do than it would be for me to make any comments aboutthat report.

MR. LYON: Are you content to leave it then on that point, Mr. Bateman, that any of the substance of criticisms of the report of 1970 by Underwood-McLellan are contained in the Task Force Report?

MR. BATEMAN: I would say that the Task Force Report takes the information and reworks it and comes out with what I think are quite satisfactory solutions to the problems based upon the greater input and more detailed work done and based upon the simulation program that Manitoba Hydro had developed.

MR. LYON: And that the Task Force Report reflects any conditions that may have been applied by the letter of transmission from Underwood-McLellan after the engineer in question had left?

MR. BATEMAN: No, no comments at all on that.

MR. LYON: Pardon?

MR. BATEMAN: No comments at all on that in the report.

MR. LYON: In the report. But does it . . .?

MR. BATEMAN: We have not indicated if there was any deficiency. Our studies were directed at making sure that our work could not be construed to have those deficiencies.

MR. LYON: Well, Mr. Bateman, you are still, with respect, leaving a pretty serious implication about the study.

MR. BATEMAN: No, it is engineering information, Mr. Lyon, and when I am saying "deficiencies," I am referring to the deficiencies of the treatment of the engineering information.

MR. LYON: And are you prepared to say that the conditions that were registered by the principals of Underwood-McLellan when they transmitted the report, that those conditions are manifested in the Task Force Report and reworked in there?

MR. BATEMAN: I am not sure that I understand what you mean by the conditions transmitted by the Underwood principals.

MR. LYON: Well, the conditions attached to the Report in their letter of transmittal.

MR. BATEMAN: No, it wasn't the transmittal letter. It was when I raised the question with the principals of Underwood-McLellan as to the treatment of some of the information in the report that I was given a clarifying letter to indicate their views about the treatment of that engineering information.

MR. LYON: I see. And were these hydraulic people who sent the information to you?

MR. BATEMAN: Oh yes, yes. Very competent hydraulic people.

MR. LYON: Now, on the development sequence costs on the page that we were looking at the other day, Mr. Goodwin was going to comment I believe, Mr. Chairman, on the 1970 study, the current program and the difference on those figures and let us know what his view was.

MR. BATEMAN: Yes, Mr. Goodwin can now talk about those figures.

MR. GOODWIN: Mr. Chairman, I think I told Mr. Lyon last meeting that I have not checked out these annual capital retirement costs in this study. I assume that they would be right in the context of the calculations on this piece of paper. I have again to emphasize what I said last time, that I don't regard the 1970 study sequence referred to on this sheet as a practical hydro development sequence and so the costs don't have any meaning.

MR. LYON: You don't dispute the figures, however, Mr. Goodwin?

MR. GOODWIN: No, I am sure the figures are fine for what they are.

MR. LYON: Assuming the conditions of the two sequences.

MR. CHAIRMAN: What are we referring to now?

MR. LYON: We are referring, Mr. Chairman, to the comparison of development sequence costs 1975 to 1987 which was distributed to the committee last week, a document prepared by Mr. Spafford.

MR. CHAIRMAN: And we are now dealing with that matter as an annual report from Manitoba Hydro.

MR. LYON: Have you any other comments on the comparisons that you see there, Mr. Goodwin?

MR. CHAIRMAN: I really don't see what the relevance of that report which is not before the committee.

MR. LYON: Well, Mr. Chairman, we can soon put it before the committee. I would move that Mr. Gordon Spafford be called immediately. That will put it before the committee. I make that motion that Mr. Spafford be called as a witness right now.

MR. CHAIRMAN: I am sorry to say that the committee has no quorum and, therefore, cannot continue sitting.

MR. LYON: Did that just come to your realization, Mr. Chairman?

MR. CHAIRMAN: I just realized it just now.

MR. LYON: Just forget it. It just got you out of a hot spot, did it, Mr. Chairman?

MR.CHAIRMAN: Well, you could have moved that motion when the committee had a quorum.

MR. LYON: No, I couldn't because you started to question the document we've been discussing for two days before this committee.

MR. CHAIRMAN: I just fail to see the relevance. The committee cannot continue seeing the fact that we do not have a quorum. But I will wait for a quorum.

MR. LYON: That's a cop-out if I've ever heard one.

MR. CHAIRMAN: I'm not going to cop-out. I'll wait to see if we can get a quorum.

MR. LYON: Yes.

MR. CHAIRMAN: Where's the Clerk? We shall await, the committee will wait for a quorum. That was an incidental factor. It is the procedure of the Committee . . . The practice has been over the number of years that I have been chairing the Committee, that the Chairman of Manitoba Hydro is here to report and answer questions of the members of the Committee on the Annual Report. There is no provision in my opinion for anyone to be called forth on any other matters which are not directly related to the Annual Report of Manitoba Hydro.

I reject the motion that Mr. Spafford be called forward.

MR. LYON: Mr. Chairman, on the point of order. I refer you to Rule No. 77 of the Rules, Orders and Forms of Proceeding of the Legislative Assembly of Manitoba, which clearly provides that a Committee can establish its own regulations with respect to the hearing of witnesses before the Committee. Rule No. 77 — The Committee may make regulations governing representation to be made by the general public at Committee meetings and the regulations shall conform to the general guidelines established for the House. Then Rule No. 78 goes on to talk about a witness summons to attend before a Committee. It clearly contemplates that people can be called before these committees.

MR. CHAIRMAN: Before Committee. Does it deal with the Annual Report of Corporations . . .

MR. LYON: It deals with standing and special committees. This is a Standing Committee of the House, Mr. Chairman.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: The rule that Mr. Lyon is referring to is one which I don't believe is intended to cover circumstances relating to the consideration of an annual report of the corporation. If indeed that was what was intended, I'm sure it would have happened by now and I don't believe that there's any precedent whatsoever . . .

MR. LYON: On that point, Mr. Chairman, there is a clear precedent, it's in Votes and Proceedings. The year escapes me—I'm sorry I don't have it open in front of me—1967 or 1968 before this very Committee. When the report of the Manitoba Telephone System was being considered by the then Committee, a delegation of residents appeared from, I believe it was Headingley, to seek extension of long-distance dialing privileges, or exemptions from those long-distance dialing privileges within the City of Winnipeg and that group was heard.

MR. SCHREYER: Mr. Chairman, I don't recall the specific circumstances surrounding that. But I do recall that sometime, approximately around 1964 or 1965, there was a motion in this Committee with respect to the Grand Rapids haulage contract, to have certain persons appear, and that was not regarded as being within the scope and intent of the proceedings of this Committee and was not acceded to.

MR. LYON: On the point of order, Mr. Chairman. *Au contraire,* this Committee of the House did year, did have some hearings with respect to the Grand Rapids haulage contract. I don't know the years in question but the journals of the House will reveal what they were. I merely suggest that this Committee and I will amplify the motion, Mr. Chairman, that this Committee hear Mr. Spafford, hear Mr. Kristjanson and hear Mr. Campbell.

MR. CHAIRMAN: Mr. Premier, if I may. I still state that the motion is not in order. You may challenge. I rule the motion out of order.

MR. LYON: I have to challenge your ruling, Mr. Chairman.

MR. CHAIRMAN: The ruling of the Chair has been challenged. All those in favour of the Chair's ruling, that the people called for by Mr. Lyon are not allowed to appear before this Committee dealing with the Annual Report of the Manitoba Hydro . . .

MR. LYON: The question is put, Mr. Chairman, let's get on with it.

MR. SCHREYER: Let's get on with it.

MR. CHAIRMAN: All those in favour that the motion of Mr. Lyon be, as in my opinion, not in order . . .

MR. LYON: That the ruling of the Chair be sustained, I think the question is, Mr. Chairman.

MR. CHAIRMAN: That's right, that the ruling of the Chair be sustained. Thank you, Mr. Lyon. All those in favour? (Six members in favour.)

All those opposed? (Two members opposed.)

The Chair is sustained. We shall proceed. Mr. Lyon, do you still have questions?

Well, I think that it would be a good time to adjourn, it is almost 12:30. Committee rise.

MR. LYON: Before we rise, Mr. Chairman, for information for the next meeting, I wonder . . . And I thank Mr. Wilson for producing the projections that were given to us this morning. What I would like to have is the ten-year projection which was in existence in 1969. I know that these projections are prepared annually and I wonder if Hydro, at the next meeting, could produce the ten-year projection which was compiled and produced in 1969, the historical one. —(Interjection)— I am sorry, it was Mr. Fraser.

MR. CHAIRMAN: Okay. The Committee rise.