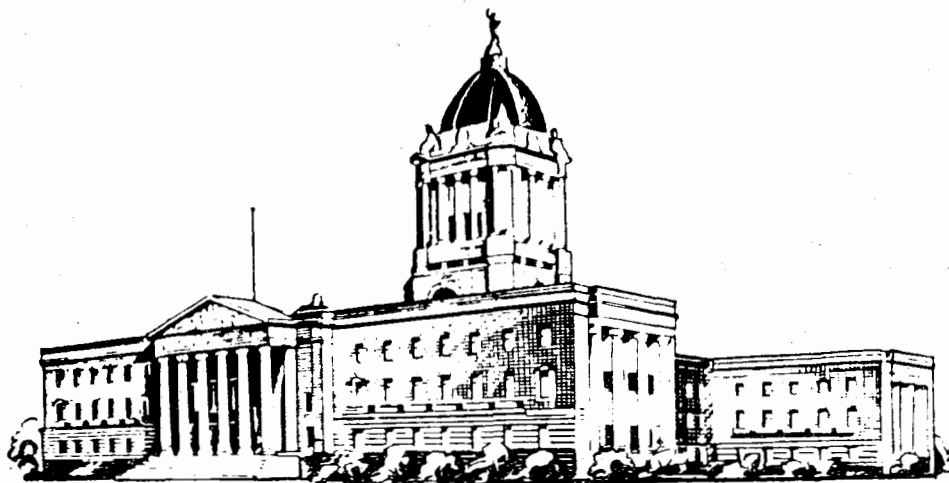




Legislative Assembly of Manitoba

**HEARINGS OF THE SPECIAL COMMITTEE
ON
PUBLIC UTILITIES AND NATURAL RESOURCES**

**Chairman
Mr. Harry Shafransky, M.L.A.
Constituency of Radisson**



10:00 a.m., Tuesday, April 8th, 1975.

PUBLIC UTILITIES AND NATURAL RESOURCES COMMITTEE

10:00 a.m., Tuesday, April 8, 1975

CHAIRMAN: Mr. Harry Shafransky.

MR. CHAIRMAN: The Manitoba Hydro-Electric Board, 23rd Report.

MR. CRAIK: What's the quorum?

MR. CHAIRMAN: Seven.

MR. CRAIK: We've got six. -- (Interjection) -- Oh, it's the Chairman, okay.

MR. CHAIRMAN: (Pages 1 and 2 were read and passed) Page 3 - Mr. Craik.

MR. CRAIK: Mr. Chairman, it's the Chairman's Report here so we might as well continue on with general questions at this point. I wonder if Mr. Bateman could give us more information on some of the things we were talking about last week.

First of all, with regards to the tender system that Manitoba Hydro used, and last week he indicated that the tender on \$90 million or \$87 million equipment had been awarded which included primarily I gather the equipment involved for the conversion. Going by a press release that was handed out that day which I received a day or two later, indications are that the transformer equipment, which will be built locally by Federal Pioneer, has a pretty significant part of the value of the total and I wonder if he could indicate what the total value of the transformer equipment is as opposed to the total.

MR. CHAIRMAN: Mr. Bateman.

MR. BATEMAN: Yes. The transformers represent something in the order of \$17 million to \$18 million as part of the 31 percent Canadian content that would be part of the Brown-Boveri order.

MR. CRAIK: All right. So it would represent most of the Canadian content in the Brown-Boveri. Why, when you're calling tenders like this, do you throw in or include in things such as transformers to your solid state conversion. Is it usual practice to let one tender for the whole range of products required?

MR. BATEMAN: I think you'll find most utilities and manufacturers want to specify the design of the transformer with the rectification equipment because they have to work as an integral part of each other. The current from the DC rectifiers, as you probably are aware, has to pass through the transformer. Therefore it has to have a special characteristic of transformer, it's not an ordinary transformer.

MR. CRAIK: I see. The transformer in this case is, it's an integral part of the conversion equipment then.

MR. BATEMAN: Yes, it would be an integral part. Most manufacturers like to specify the characteristics of the transformer that is going to work with their rectification equipment.

MR. CRAIK: Well, in this particular case then, it was necessary to include the transformers in with the overall.

MR. BATEMAN: It was felt to be good engineering to include the transformers in with the overall, yes.

MR. CRAIK: Had the tenders gone to Canadian General Electric, would the transformers in that case then have been made in Eastern Canada as opposed to Winnipeg?

MR. BATEMAN: They were proposing to make 75 percent of the transformers in Eastern Canada in the tender they submitted.

MR. CRAIK: And the rest would have been here. Is that correct?

MR. BATEMAN: The other were expressed as an option "could be made in Manitoba".

MR. CRAIK: Then if the transformer part of it had been split off from the overall tender, how would the transformer part of it have affected the bids? You mentioned last day that there was two figures, one was 16 million and the other was 7 million.

MR. BATEMAN: The fact is though, Mr. Craik, we did not feel it good engineering. Our consultants and all the manufacturers that had an input to the specification before we released it in its final form, all recommended the transformers be included as part of the specification.

MR. CRAIK: What were the two figures you used last week on the difference in the bids? One added up to 16 million and the other, if you looked at it in isolation, looked like 7 million.

MR. BATEMAN: Yes. The difference in first price was about 7-odd million dollars and the evaluated price difference was 16.6 million dollars.

MR. CRAIK: Come again on that. What was the . . .

MR. BATEMAN: I said the tendered price difference was in the order of 7 million, a little more than 7 million dollars, and the evaluated price difference was over 16.6 million dollars.

MR. CRAIK: Meaning that the equipment actually tendered wasn't the same in both cases.

MR. BATEMAN: Oh, yes. It was in conformance with the specifications.

MR. CRAIK: Well, okay. Now, all I'm asking is what's the difference between tender price and evaluation price.

MR. BATEMAN: Well, as you probably are aware this equipment has to go into a building so the building would be part of the evaluation. The tenderers were aware before they bid on what the consultant and Manitoba Hydro would evaluate each square foot of building for and each cubic foot of building for. So the incentive on the part of the contractor or the tenderer then was to do a good engineering job of providing equipment that would evaluate out at the best price. In fact, all the tenderers congratulated Manitoba Hydro and their consultants on the specification. I think it's probably the most comprehensive specification on DC equipment that has yet been released.

MR. CRAIK: Is this a very voluminous type of document that you issue for this sort of thing?

MR. BATEMAN: Very voluminous, yes.

MR. CRAIK: This is all part of the call for tenders then?

MR. BATEMAN: Yes, that's part of the call for tenders. It's a very comprehensive specification.

MR. CRAIK: Did this Brandon aspect of the Canadian General Electric bid come in at the time of the tenders or did it come in after?

MR. BATEMAN: I'm not sure that I quite understand what your question is.

MR. CRAIK: Well this proposal by CGE to build the converter and other equipment planned at Brandon, did it come in as part of their tender or did it come in after they realized they weren't the low bid?

MR. BATEMAN: I think originally, if my memory is correct, before the tenders closed or about the time they closed, the General Electric Company was advising the Premier and myself that they were planning to build a plant in Manitoba which had nothing to do with the order for this equipment. They were also advising us, of course, that if they got the order for this equipment it would add to the economic base or the economic launching pad, so to speak, for the new plant in Brandon, and I don't deny that it would have been of great assistance to the General Electric Company to have had that order.

MR. CRAIK: Originally, when you set up this whole operation in 1966, there was set up also the Nelson River authority that was designed at that time to try and encourage industrial spin-off of the Nelson River Development. It sounded to me that, you know, the attitude being taken last week was that there was something very unusual or untoward about an industrial company wanting to use it as a lever to set up manufacturing. But it seems to me that away back in 1966 this was part of the intent of the whole development, namely it was sort of, you know, spearheaded through this Nelson River authority.

MR. BATEMAN: Well, Mr. Craik, Manitoba Hydro did not set up the Nelson River agency of the Development Corporation or whatever it was you were referring to. I think that was an agency that the government that was in power in that day had set up, and I must admit that I wasn't very close to the terms of reference. In fact I don't think I've ever seen the terms of reference for the Nelson River agency, as you refer to it, but I'm aware of it having been set up.

MR. CRAIK: So it's never really taken a very active role in terms of working through Hydro to arrange for industrial development that might be associated with the total Nelson River Development.

MR. BATEMAN: Well I think that, you know, in some areas perhaps it has taken a role but I'm not aware of it having taken any role in the industrial sense that you are referring to.

MR. CHAIRMAN: Mr. Schreyer.

MR. SCHREYER: If the discussion or question is now turning on the matter of the Nelson River agency, subsequently known as the Manitoba Development Authority, that

(MR. SCHREYER cont'd) so-called entity was defunct as of the first quarter of 1968. I mean it doesn't exist.

MR. CRAIK: Well it seems to me it was still operational after or perhaps it was just the personnel were busy on the same thing after that date. There were specific people that were hired for that purpose.

At any rate what I really want to do is to try and clear up the speculation with regards to the Canadian General Electric plant that supposedly was to have gone into Brandon and may still go in to Brandon and whatnot. What I was trying to determine was whether or not this group, you know, had not approached the government or approached Hydro as part of their tender to say that this is going to be a possibility.

MR. CHAIRMAN: Mr. Bateman.

MR. BATEMAN: Mr. Chairman, I consider that question rather making a hypothesis as to something that I am not in a position to answer because I don't speak for the Canadian General Electric Company. You are trying to clear up, Mr. Craik, some areas of misunderstanding perhaps. I would suggest that the only people who can tell you whether or not there is going to be a Canadian General Electric plant in Brandon is the Canadian General Electric Company.

MR. CRAIK: The public is being given the information that - attributed to yourself and to the Premier - that the plant in Brandon was not associated necessarily with the bid on this equipment. And I don't think you said that here at this table specifically although it was inferred and has certainly been taken that way that there . . .

MR. CHAIRMAN: It was so indicated at the last meeting.

MR. CRAIK: . . . that there basically is no relationship between their proposal for a plant in Brandon and the tender which has just been given.

MR. GREEN: I believe Canadian General Electric . . .

MR. CRAIK: Well it's not a case of me believing Canadian General Electric or you or anyone else but the public of Manitoba apparently is being given the impression that there was no relationship between this bid and the proposal of CGE to locate at Brandon. And if you say that's the case, well that's the case. I don't believe it to be the case . . .

MR. CHAIRMAN: Mr. Green.

MR. GREEN: Mr. Chairman, no. The member has said that the public has been given the impression. What I was advised and what I recall being said at the meeting is that Canadian General Electric said that there was no relationship between that contract or their getting or not getting the contract and their decision to build a plant at Brandon. So if the public has got that impression, it is as a result of Canadian General Electric's communication having been made available to this committee. It's not Mr. Bateman or Mr. Schreyer who said that. Mr. Schreyer said that he was advised by Canadian General Electric. Now if Canadian General Electric will say that they did not so advise Mr. Schreyer then I guess you may have some grievance with the Premier or he may have some problem with what was said by whom. But the only information that the Committee was given was that Canadian General Electric said that there was no relationship between the receiving or not receiving that bid and their decision to build a plant at Brandon. At least that was my understanding and if I am incorrect, I wish somebody to correct me.

MR. CHAIRMAN: Mr. Craik.

MR. CRAIK: Well you seem to be apprised of the . . .

MR. GREEN: I only heard -- (Interjection) -- That was said at the last meeting.

MR. CRAIK: You're saying that Canadian General Electric has said this.

MR. GREEN: I am saying that . . . I did not speak to Canadian General Electric but I believe that the Premier and, if I'm incorrect then he will have to correct me, told the meeting, the last meeting, and it will be in transcript, that he was advised by Canadian General Electric that the contract that we are now talking about and their getting it or not getting it would have nothing to do with their decision to build a plant in Brandon. And if that is incorrect then it's not because Mr. Bateman or the Premier has misinformed committee, it's because Canadian General Electric has misinformed them and I don't choose to assume that Canadian General Electric would misinform us.

MR. CRAIK: Well I recall, Mr. Chairman, that the First Minister did refer to something about if he understood the Queen's English that this was still . . . there was this reference to it. Now what I'm really asking then, it's the government's and Hydro's position at this

(MR. CRAIK cont'd) point that the proposal to build a plant in Brandon had very little if anything to do with the bid that was presented last week.

MR. GREEN: That's what General Electric said.

MR. CRAIK: I'm not asking you what General Electric said.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Mr. Chairman, that is a good recollection of what was said exactly a week ago. There's no mistake about it. We were given very clearly to understand that so far as Canadian General Electric was concerned, they wanted us to feel secure in the knowledge that Canadian General Electric was not attempting to influence the normal procedures of opening and evaluating bids because of what they may or may not do at Brandon. That was what was said. As to what was thought may be another story, but that is what was said to us.

MR. BATEMAN: Perhaps I could confirm, Mr. Chairman, that there was no mention in the tender documents, that were submitted by any company, of a plant in Manitoba but there was a request in the specification that they should indicate what portion of the equipment they would propose to build in Manitoba.

MR. CRAIK: Well perhaps we can get at this through the - I understand that an Order for Return was accepted. We may get some more information through the correspondence that the government has had directly. I presume that there is correspondence, otherwise it wouldn't have been accepted. So we may have to wait until that in fact is . . .

MR. CHAIRMAN: Mr. Green.

MR. GREEN: Mr. Chairman, I don't want to interfere with Mr. Craik's line of thinking but I don't, on the other hand, want him to proceed on a mistaken assumption. The government would not refuse to complete an Order for Return on the basis that there was no information. We would file it with a nil return as was done by the previous administration. So don't gather that acceptance of an Order for Return implies the existence of communication.

MR. SCHREYER: Although in this case there is.

MR. CRAIK: Well I assume, Mr. . . . Well we could have saved a few minutes here by my neighbours exchanging comments here.

MR. GREEN: Well you were saying that we wouldn't accept an Order if there was no information. That's not the case.

MR. CRAIK: Well I would assume on this topic which is all of two or three weeks old that you might recall whether there was or was not correspondence.

I wonder if we could get a list from you, Mr. Bateman, giving the major equipment, the breakdown of the tender according to major equipment. Not the complete tender but a breakdown of the major equipment, the amounts and the location of manufacturers.

MR. BATEMAN: Well I'd be happy to give you a copy of the specification which would give you an indication of the type of equipment that is being called for. It's not our normal practice to release tender documents after they've been submitted to Manitoba Hydro.

MR. CRAIK: Oh, you don't normally give them out to the other . . . ?

MR. BATEMAN: No, we don't normally give them out to the other. What you're asking us to do, in effect, is to reveal somebody's manufacturing secrets to his competitors and we normally don't do that.

MR. CRAIK: Well okay. The government, the usual practice in the government, I believe, is that the tenders are revealed after they're opened. They're open to the public.

MR. BATEMAN: There's a difference here, Mr. Craik. We do have public openings of construction contracts, like tenders that are called on construction projects. We have a public opening and you know this is building physical . . . building anything. But when it comes to highly technical data which has some proprietary value to each of these manufacturers, I'm sure that they'd just love to know what their competitor was designing and providing and how he was doing it. You know it would give them a relatively large saving in engineering time. Now we are not going to be party to that sort of a transfer of information.

MR. CRAIK: Did you say then you'd submit a copy of the tender document or whatever . . . ?

MR. BATEMAN: No, I said the specification. I'll be quite happy to make a copy of the specification available to you.

MR. CRAIK: Is this a very large document?

MR. BATEMAN: Yes, it's several volumes.

MR. CRAIK: All I want is an abbreviated form. (Laughter)

MR. BATEMAN: Well, Mr. Craik, the documents that came in, the tenders when they came in for this particular order didn't come in an envelope, they came in big wooden boxes. The amount of technical data that was submitted with each one of these bids was, you know, it was a fairly large amount of paper, and it was worth, in the estimation of some of the people that were tendering, in the order of \$200,000 just to prepare a tender for this job. It represented several man years of engineering labour to produce an engineering design that could meet the requirements.

MR. CRAIK: Well, I'm assuming from your press release that you haven't got a breakdown. You know, you've got Canadian content, you've got Manitoba content and that sort of thing already in your news release. All I'm asking for is something that goes a little bit beyond that that tells us how this sort of thing breaks down without divulging secrets from one competitor to another competitor. If you have that sort of a thing that you could give me that I could keep in my desk rather than in the middle of my living room, it would be much more useful. All I want to know is a little more than what you've got in your press release, because in reading your press release, I couldn't tell whether the transformers were part of this 31 percent you referred to or where they came in.

MR. SCHREYER: On a point of order, Mr. Chairman.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: It occurs to me that it may be very difficult for Manitoba Hydro to respond to such a request, not because of some general resistance but because of a lack of a specific or lack of specification. And so rather than leave the impression that there may be some general resistance which would be an unfair impression, I'm wondering if Mr. Craik could not specify either now or in writing in a matter of a day or two or however, and then Mr. Bateman is in a position to indicate more precisely. But if there is an absence of . . . What specifically additional to that which appeared in the press release would you like further information on? "Anything" is pretty general.

MR. CRAIK: My original question was, could it be broken down into the major components, the converter equipment, the transformer equipment, the circuit breakers, and I don't know if there's circuit breakers in it; the amounts of those and whether they're a Canadian manufacturer or not? Their point of manufacture.

MR. BATEMAN: Well, you see the tender when it comes in has the probable source of manufacture of a lot of this equipment. These people would now go out and confirm orders for equipment in Canada and so on. So, you know, there are condensers and odds and ends like that that represent the filter work and if you would like to ask for some specific areas, we'll be happy to respond as the Premier has indicated.

MR. CRAIK: Well, I think that you can. . . Actually that's fine except I think that probably you can do it to . . . if I ask for it then you're going to have to come back and say we don't want to do that because you're divulging it in a way that your competitors are going to complain about.

All I want is for you to break down that what you said in your press release a little further, according to those major categories that go into the whole tender rather than, well, just rather than the loose arrangement that there is there at the present time.

MR. BATEMAN: We'll undertake to try and provide you with some more information on what Canadian content is in that.

MR. CRAIK: Right. Show me where the 31 percent is. How much is going into the transformers, how much is going offshore and as far as you can lump together the components of the system according to your converters, transformers, breakers or whatever else goes into it. I'm sure there must be major segments there.

MR. CHAIRMAN: Page 4, pass.

MR. CRAIK: I expect, Mr. Chairman, there's a few more questions that I might have on the Chairman's report.

MR. CHAIRMAN: Fine.

MR. CRAIK: I wanted to get some more information on the Nelson project. First of all, can you give me at the present time your estimated total energy production for the whole Nelson project at completion, estimated energy production?

MR. BATEMAN: Well, as my memory goes, I've printed this in technical publications. It's in the order of 45 billion kilowatt hours from the Nelson River.

MR. CRAIK: How much changes or . . . is that capacity or production?

MR. BATEMAN: That's energy.

MR. CRAIK: Now to what extent . . . Incidentally, if you want to take this information, you want to take as notice and provide it, you know, at a later date, that's fine too.

MR. BATEMAN: Well, if you would give me the questions you have now, I'll try and provide you with the answers now if we can.

MR. CRAIK: Well I'd like to get, at the present time with the revisions you've made to the Churchill diversion, the total energy production predicted from the whole Nelson project.

MR. BATEMAN: Well, the total energy with the exception of small refinements due to more detailed engineering that's being done now than was done then, the energy from the Nelson-Churchill River diversion, with the original concept of 1966, is the same energy as we are going to get now, with the exception, and I say this, with the exception of that small part of the Notigi plant, if and when we put generation into it that would relate to the difference in head between the 870 or 869 elevation less its hydraulic radiant as opposed to the 850 elevation less its hydraulic radiant. So there's a small difference on the Notigi forebay which means a small difference of energy in the overall concept. Now that is not a significant number. But that's the only difference with the exception of refinements in engineering detail of locating . . . In those early days we had one plant at Limestone. We have found it more economic to build two plants, one at Limestone and one at Conawapa and recover more of the head, so we are getting more out of those two sites than we would have out of one site.

MR. CRAIK: What is the capacity at completion of the Churchill diversion portion of it?

MR. BATEMAN: The capacity of the . . . ?

MR. CRAIK: No, just a minute, no, I'm sorry, energy.

MR. BATEMAN: Oh, the energy, the energy will be the same, we're dealing with the same amount of water except for that little bit of head difference on the Notigi forebay. Water falling through distance is energy. Whether you flow it all out in 55,000 second feet for six months or 30,000 second feet for 12 months, you get the same energy.

MR. CRAIK: So what you're saying is that you're not going to put any more water down the lower Churchill than you were going to before?

MR. BATEMAN: That's right. On the average . . . there's only so much water in the Churchill River. We're trying to get all of the water we can out of the Churchill River barring of course the ecological concepts of making sure the lower Churchill has enough water. And those waters that flow down the Churchill River to the bay will not produce energy in the Nelson. But the average water that was available for diversion under the previous concept is still the same water that we're going to put down under the present concept.

MR. CRAIK: You say that you're going to have the same amount of water down the lower Churchill as you had before but you're, in this case, going to have enough to satisfy the ecological requirements.

MR. BATEMAN: It'll be spread out, no, be the lower Churchill.

MR. CRAIK: Right.

MR. BATEMAN: Yes, the lower Churchill is roughly the same amount of water.

MR. CRAIK: Yes.

MR. BATEMAN: We're making sure that the lower Churchill is going to have sufficient water for the town water supply and so on.

MR. CRAIK: The ecological studies, the Nelson River basin and Churchill studies, whatever it was, weren't they directed to a very large extent at the lower Churchill?

MR. BATEMAN: I'm sorry, Mr. Craik . . .

MR. CRAIK: Were the special studies that were undertaken about four years ago, were they not aimed at the lower Churchill to . . . ?

MR. BATEMAN: Well the special studies that have been undertaken over the last two or three years, or four years I guess, are under the joint sponsorship of the Federal and Provincial Governments doing a study of the Churchill-Nelson basin system.

Now those studies have directed themselves in more depth to the lower Churchill and the portion around South Indian Lake and the Nelson River and Lake Winnipeg. You know, they've been looking at the whole area that has any change as a result of the development by Manitoba Hydro. And those studies are confirming some of the things that we felt we would run into, such as low water levels on the lower Churchill below South Indian Lake, some of

(MR. BATEMAN cont'd) those lakes will decrease in surface area by 30, 40-odd percent, and so on. But these are not new findings. I mean, they're new in the sense that they're now being studied in more depth by a study board than they were previously.

MR. CRAIK: Has the federal permit on the lower Churchill been issued?

MR. BATEMAN: Yes.

MR. CRAIK: Is that all completed now, all the Federal permits?

MR. BATEMAN: Well I think I reported that last year, Mr. Craik, that we had a licence from the Department of Transport to . . .

MR. CRAIK: Wasn't it conditional on certain maintenance of certain flows?

MR. BATEMAN: Oh, there were some special requirements in but interpretation of those requirements, I think, it's been broadly interpreted by the federal authorities. I don't think we're going to run into any problem with them.

MR. CRAIK: And the problem remains at the Town of Churchill as far as the water flows are concerned?

MR. BATEMAN: Yes, we do have a problem at the Town of Churchill. Some of our people will be going to Churchill later this month to discuss with the people of the Port of Churchill, and we will take the corrective action to ensure that the Town of Churchill has an adequate supply of water. This will require some relocation of the water intake.

MR. CRAIK: Okay. With regards then to the energy production from the Churchill diversion, basically you're saying that there's very little change in the water flow down the lower Churchill, the total amounts of water at least. You are saying you're going to change the timing and so on?

MR. BATEMAN: Yes. The timing is, you know, we're spreading out the Churchill River water that's available. We're spreading it out over a more uniform period of the year because we have Lake Winnipeg storage which we can now maximize the use of the Nelson River water by releasing it more in tune with the demands on the electrical system. The shape of the hydrograph is quite possible now of inversion, as compared to the natural hydrograph that you'd get out of Lake Winnipeg.

MR. CRAIK: Then, basically, what it comes down to is that out of all the changes that have been made, the only change on the lower Churchill is the flow during the period of the year at which it occurs. You've taken out the highs and lows or shifted or can control it differently. But based on the total amount of water going down it is unchanged, what's happened through all the changes that have gone on in the last five years boils down to lowering the level of South Indian Lake only.

MR. BATEMAN: Yes. I think, Mr. Craik, if I understood your question, you were saying that the water that goes down the lower Churchill and I think you mean down the diversion route.

MR. CRAIK: No, no, I'm talking, down the lower Churchill past . . .

MR. BATEMAN: The lower Churchill below Missi Falls.

MR. CRAIK: Missi Falls, yes.

MR. BATEMAN: We had in the licence limited the minimum flow that we can release down there and it depends upon the time of the year. I think the objective is a minimum of 1,500 in the summertime. In the wintertime, is it? A minimum of 1,500 in the wintertime which is much more than the City of Winnipeg would require for its water supply.

MR. CRAIK: Well, I just want to be sure then that we were understanding one another. When I was talking about the lower Churchill I meant below Missi Falls.

MR. BATEMAN: Yes, all right, below Missi Falls, then. As I pointed out to you there would be a diminution in the surface area of some of those lakes because there's less water flowing out of South Indian Lake so you've got less surface area.

MR. CRAIK: Fine. I just want to tie it down then and as far as the diversion water total is concerned your statement is that the only difference, there's no difference in the total amount of flow then through the diversion, there is some loss in the head of Notigi.

MR. BATEMAN: Yes, that's . . .

MR. CRAIK: And that's the difference in the energy production in the diversion?

MR. BATEMAN: That's the basic . . .

MR. CRAIK: What is the total cost difference going to be from the original high level diversion plans as opposed to what you've gone to now?

MR. BATEMAN: Well, I think that you're asking me to express some very hypothetical

(MR. BATEMAN cont'd) sums here because I would have to do some evaluation of those changes and reflect the changes. Anything we had done would not have been the estimate as you know, I mean costs have been going up. So I'd have to go through the original estimates and see what impact the present inflationary forces would have had upon those estimates.

MR. CRAIK: The costs you're estimating at this point are \$170 million for the . . .

MR. BATEMAN: Yes, that's my present estimate of the Churchill River diversion and I warn the committee that it may go higher.

MR. CRAIK: And the original, I think the Missi contract was let in 1969.

MR. BATEMAN: No, the Missi contract was never let.

MR. CRAIK: Was never let but the tenders had been called on it.

MR. BATEMAN: And it was let for something in the order, or it was, I think, tendered, if I can use the right word, it was tendered for about \$16 million then. And I think when we finally let a tender for Miss Falls - I'll just check the current, the tendered information - I think the Miss Falls was about \$15 million if I'm not mistaken. So, you know, but I don't think that has a great deal of significance.

MR. CRAIK: It's a different structure, too.

MR. BATEMAN: Yes, it's a different structure, sure. It has more -- (Interjection) -- oh, it's more. I'll correct that. Let me get the exact figure of what the . . . I'd have to check the exact tendered price of the Missi structure. I don't have that figure here.

MR. CRAIK: Can you give me then . . . Well, at any rate, the original on the Missi was, say around 16, and the channelling and so on was of the same order, was it not, estimated?

MR. BATEMAN: You know, Mr. Craik, I think if we went through this, I could perhaps dig out the transcript of last year and we could go over these same things and get the information. I think these questions were asked last year.

MR. CRAIK: Also though last year, I asked you what the difference was in the capacity of the diversion and you said there was no difference from the old . . .

MR. BATEMAN: No, I said there was no difference in the amount of energy, that was . . . You see water falling through a distance is equal to the energy. Now that is what we're going to get out of the Churchill River when we put the water into the Nelson, whether we take it out in a short period of time and put lots of capacity in, or take it out in a short period of time and put a smaller amount of capacity in. You're true, on the Burntwood River Diversion we don't have to spend as much money on generation now. We don't have to put as much generation in there to get the same amount of energy, because in the old scheme some of that generation would have been sitting idle a good number of months of the year, whereas under the average flow conditions there would be a normal amount of reserve capacity in those plants to ensure that we can take a unit off for maintenance without losing any energy.

MR. CRAIK: Can you give me the two different figures?

MR. BATEMAN: What two different figures?

MR. CRAIK: Well, capacity and energy then under the two different conditions. You're saying now, you're getting it out of the Nelson plants rather than other diversion plants and therefore you're talking about energy.

MR. BATEMAN: Yes, you see under the concept of peaking on the Burntwood River sites with the winter flows which - by the way you know we hadn't really examined these ice conditions that we're going to get on the Burntwood when those concepts were there - so they may not be valid. We may not have been able to operate as high a rate of diversion as we thought we were going to be able to operate, because of these ice-jam problems which are presently affecting us in the Burntwood River Route.

Now, the figures, the relative difference of the installed capacity on the Burntwood River under a flow of something like 55,000 cubic feet per second was more, by perhaps as much as 300 megawatts, just in round figures. I think we're now contemplating an installed capacity on the Burntwood River system of, oh about 700 and some odd megawatts, and I think we had as high as either - just close to 1,000 megawatts. So we're losing somewhat in the order of less than 300 megawatts of capacity. But that capacity is, you know, it's going to have to sit idle under a high flow figure for a good number of months of the year as opposed to the present concept of running those, will be high energy capacity back to the plants.

I think the important thing, the important thing in the Churchill River diversion was to get the energy that is capable of being produced by the Churchill River into the Nelson River

(MR. BATEMAN cont'd) plants where, incrementally, we had to put in very small capital additions in order to achieve the value of that energy because we had to place the dam and all the ancillary works just to develop the capacity that was available in the Nelson River. Now by putting the Churchill River, and this concept, you know, is not new, it dates back to the time when the studies were going on in the sixties as to how most economically to develop the Churchill-Nelson River system. So there were the same concepts then as are in use today. Also elements of the overall development of the Nelson that were postulated back in the early sixties and mid sixties required regulation of the Lake Winnipeg, diversion of the Churchill River and development of plants on the Nelson to utilize that energy.

MR. CRAIK: Let me just finalize that then. You're saying that your total energy recovery from it is going to be the same as the original, but that's as a result of the moves that you have made on the Nelson rather than on the Churchill, that your changes in the plants on the Nelson are . . .

MR. BATEMAN: No. I'll install enough capacity on the Burntwood River system to ensure that I can take all of the energy that's flowing in the Burntwood River from Churchill River water out of that water. So if we think only of the diversion flowing from the South Bay down to Split Lake, it drops from 842 to about 500 - there's several hundred feet of drop there. Now we can capture the energy that's represented by that much water flowing through that distance, regardless of what scheme you use to develop the Churchill River. All it relates to is the amount of installed capacity that you would put in place on the Burntwood River.

MR. CRAIK: You're putting 300 less in.

MR. BATEMAN: Somewhat close to 300 less and I get the same energy out, but I don't get the same capacity out.

MR. CRAIK: So you're getting the same energy out. Are you recovering the same amount of head that you would have recovered otherwise?

MR. BATEMAN: Yes.

MR. CRAIK: Exactly, by a different . . .

MR. BATEMAN: Except for the difference on Notigi as I outlined to you.

MR. CRAIK: What does that difference amount to?

MR. BATEMAN: Less than 20 feet.

MR. CRAIK: What does it mean in terms of production?

MR. BATEMAN: Twenty feet. Well, if I remember my hydraulics formula, it goes something like QH over 11 is a rough horsepower rating, so we'd have Q being something like 30,000 cubic feet per second, H being somewhat less than 20, that's 60,000 divided by 11, about the equivalent of -- (Interjection) -- something in the order of 200 million kilowatt hours a year, Mr. Goodwin tells me. I don't know whether my arithmetic agrees with his or not, but . . .

MR. CRAIK: 200 . . . ?

MR. BATEMAN: Yes, it's roughly 60 million kilowatt hours a year, isn't it?

MR. CRAIK: What does it work out to, 60 million?

MR. BATEMAN: We've got some good hydraulic engineers sitting back here, maybe we could get one of them to work this out for us. But it's a relatively insignificant amount. If it was 200 million kilowatt hours instead of the 60 million and you compare that with the 45 billion that we get from, roughly 45 billion from the Nelson River, and I think there's another 11 billion in the diversion water so, you see, it's a relatively small number by comparison to the total.

MR. CRAIK: Well, it's roughly . . . at the prices that your sale price is today, it represents about a million dollars a year in production, at 1 1/2 cents.

MR. BATEMAN: 200 million kilowatt hours at 1 cent . . .

MR. CRAIK: I'm using 60, so it's even higher.

MR. BATEMAN: 60 at one cent would be . . .

MR. CRAIK: Half a million.

MR. BATEMAN: Half a million a year, yes. And our total, and that's gross revenue, when we subtract, of course, the higher cost of the capacity that we had to put into those three plants on the Burntwood River to achieve that, there are some subtractions. What I'm saying is it's not a total plus. There are some things that you have to subtract from that to get a net benefit.

But if you want to eliminate the negatives on the other three plants on the Burntwood

(MR. BATEMAN cont'd) and just look at Notigi, then what you're saying is true. But you can't look at it as a single plant, you must look at it as the total Burntwood River and the Churchill River water which you're making use of.

MR. CHAIRMAN: Mr. Green.

MR. CRAIK: I have another question. I am going to shift the topic, Mr. Chairman.

MR. GREEN: If I could stay on this topic, Mr. Chairman, for a moment.

MR. CHAIRMAN: Mr. Green.

MR. GREEN: Mr. Bateman, Mr. Craik has dealt with some specific figures and specific components of the scheme, and I'm not an engineer, but my understanding is, and I'd like to be corrected if I'm wrong, that all of these figures plus many others are fed into a computer and the computer makes the additions and the subtractions and what-have-you and comes out with a figure -- (Interjection) -- Pardon me?

MR. SPIVAK: So you can blame the computer.

MR. GREEN: I'd prefer to rely on the computer than I would rely on Mr. Spivak. So I'd sooner want to blame the computer if it made a mistake than to blame Mr. Spivak if he made a mistake because I gather that it's impossible for the human mind to make all the additions, subtractions and variables and that's why computer technology was developed.

MR. BATEMAN: Yes. I don't deny what you say, Mr. Green, but you have to put the information in the computer so that it can do the arithmetic . . .

A MEMBER: In the right way.

MR. GREEN: I said that it's fed in. And what I understood was done by the Task Force on Hydro is that they fed in a whole series of programs trying to get a result on a whole series of alternatives many of which were listed in the Task Force report. Is that correct?

MR. BATEMAN: Basically that's correct. But nothing beats good old common sense engineering that, you know, you can assess these things and I'm trying to put this in its simplest terms so that you can relate the quantity of water and the flow here over the prescribed head.

MR. GREEN: I understand that entirely, Mr. Bateman, and I'm glad that we are getting that. What I am concerned with is that we find that one figure, and let us assume that one was able to show that one figure results in a saving of a half a million dollars by dealing with one variable; that without dealing with perhaps 20 or 30 other variables, that figure means nothing.

MR. BATEMAN: That is a good point you're making.

MR. GREEN: That is the only point that I'm making, is that if we isolate the one figure that Mr. Craik is isolating, even if it came out to a plus or a minus without examining the other 30 or 40 or 50 or I don't know how many variables, that figure would tell us nothing.

Now, it has been suggested in Mr. Craik's questioning, that the only difference with regard to the effects of the Churchill River diversion as between the - for abbreviative purposes - the high level scheme and the scheme that we are now proceeding with, is the regularity of the water that would be coming through the Nelson River. In other words, it wouldn't come at 55,000 cubic feet per second at a particular time and a much smaller figure at another time, but would come through at a more regular rate approaching 30,000 cubic feet per second for a greater length of time. And he said that all that has done is reduce somewhat water levels on South Indian Lake, I believe that that is the way he put it. Am I correct in saying that under the previous scheme there would have been 900,000 acres of land flooded and that under this scheme there would be 300,000 acres of land flooded?

MR. BATEMAN: There is a much smaller amount of land flooded. Now to get the exact numbers, I would have to check my records, I don't recall those two figures, Mr. Green. But that is correct.

MR. GREEN: Would it be approximately a third, if the figures are not correct, do you recall whether it would be as . . .

MR. BATEMAN: I'd go so far as to say, substantially less.

MR. GREEN: Substantially less. Now there has been a persistent suggestion which I'd like you to deal with that under the previous scheme that was suggested that there would be no problem at Nelson House. This has been raised several times in the Legislature and the suggestion is that by reducing waters at South Indian Lake, we have increased waters at Nelson House. I would like to have your observations on that suggestion.

MR. BATEMAN: Well, that's an interesting question. I think we must . . . I alluded

(MR. BATEMAN cont'd) to the fact, Mr. Green, that we would have had ice troubles in the route of the diversion of greater magnitude with 50,000 than we're going to have with 30,000.

MR. GREEN: For the moment, if we could deal with the waters other than the ice-jams.

MR. BATEMAN: Yes. If we take a simple channel and I think we've got to get this down to a point where we can all understand it, and we say that's the cross section of the channel which we're going to have for South Indian Lake water to flow down the Rat River, and we've put 30,000 through, that would represent a level in that channel of about that much. Now then it stands to reason, if we put 50,000 down, you don't need much imagination to realize that the water level is going to be higher.

MR. GREEN: I would have thought so but I am assured by people who suggest that they know that the water would have been lower, and therefore I put it to you. I mean responsible elected representatives of the people have said that by going to 30,000 instead of 50,000, we have increased the lake levels of the water where this water is going to flow, and the suggestions are made with a vehemence. And I would like to have your answer to that question . . . because I can only answer that the 30,000 appears to be less than 50,000 to me but I can't put it into technical terms. What would be the difference under the two systems? And I say, for the moment, I would like to ignore the ice jams and I'll deal with the . . . Do you have any water levels under the 55,000 cubic feet per second scheme at Nelson House and under the existing scheme at Nelson House?

MR. BATEMAN: I don't recall the figures, Mr. Green, but I was just going to make a further comment that occurred to me. In this channel, if we take that as the channel of the water flowing from South Bay down the Burntwood River and so on, and it's say a typical representation of such a channel, then not only do we have this higher water level for the 50,000 or 55,000 cubic feet per second, but because we don't have 55,000 cubic feet per second that we can continually draw out of the Churchill River, we've only got an average of somewhat less than 30,000; then there would be periods of time when the water level would be down here and periods of time when it would be up there.

MR. GREEN: The fluctuation . . .

MR. BATEMAN: So we would have a fluctuating water level in the diversion route which the ecologists have told us is not as acceptable as a steady flow.

MR. GREEN: Well, my information, given to me by yourself, would suggest that the . . . well do you have the winter and summer flows at the two alternate programs, do you have that now or . . .

MR. BATEMAN: Well, Mr. Goodwin has just given me, again under ice conditions, but under normal ice conditions without the jams that we were talking about, the latest calculations by Manitoba Hydro shows that levels at Nelson House would be 811 feet for the present diversion of 34,000, and 821 for the previous high level diversion of 55,000.

MR. GREEN: That's 10 feet higher under the previous program.

MR. BATEMAN: Yes. Each of these elevations could be exceeded by about 7 or 8 feet by the most extreme ice jam conditions calculated.

MR. GREEN: All right. I want to see if I got that correctly. That under the old scheme it would have been 821 feet; under the existing scheme, at Nelson House, under the existing scheme, 810 or 811?

MR. BATEMAN: 811 for the present 34,000.

MR. GREEN: So if there is flooding at 811 feet at Nelson House, there would have been much more flooding - I take it again not as an engineer but just as a common sense and if the common sense is wrong I want to be corrected - that there would be more flooding at 821 than there would be at 811. Is that an incorrect or a correct assumption?

MR. BATEMAN: Well, that's what the calculations would indicate and that's what the size of the channel would indicate. If you're putting more water through a channel, naturally unless you enlarge the channel you're going to get a higher elevation.

MR. GREEN: No, but I'm a little worried now. I may sound like I'm asking a naive and simple question, but it's been suggested to me that the reverse is true, that there would be less flooding at 821 than there would be at 811, and because it has been suggested to me I have to put it to you.

MR. BATEMAN: I can assure you, Mr. Green, there would not be less flooding at the higher flow, there would be more flooding at the higher flow.

MR. GREEN: Now, under each of these two conditions, either 55,000 or 35,000, without the Wuskwatim Dam there could be the danger of ice jams which could raise that water in each case by an additional 7 feet or so.

MR. BATEMAN: Yes.

MR. GREEN: Is that what you've indicated?

MR. BATEMAN: That's what we've indicated, yes.

MR. GREEN: Now I am also of the understanding that the Wuskwatim Dam, under the old scheme, was not something that was put in place immediately with the diversions but was something which followed the diversion program by some years.

MR. BATEMAN: It didn't come immediately but it was developed earlier in the sequence than the present scheme calls for it to be developed.

MR. GREEN: With the Wuskwatim Dam I gather the danger of ice jams is eliminated.

MR. BATEMAN: I'm not so sure that that is absolutely the case, but put it this way, with the Wuskwatim development and a higher level, you therefore have a better cross section of channel and consequently you should have less ice jams.

MR. GREEN: The probability of ice jam then is at least reduced.

MR. BATEMAN: Yes.

MR. GREEN: That would be more correct.

MR. BATEMAN: However, the concept of development of Wuskwatim has not been agreed to yet, as like the ecological damage of an 810 or 820 elevation is much greater than with an 800 elevation. And if you end up with an 800 elevation, then all the inherent ice jam problems are still there in that reach above the plant.

MR. GREEN: Now I understand that one of the reasons that this Churchill - Nelson Study Board went into existence is to be able to forewarn you of things such as ice jams.

MR. BATEMAN: Right.

MR. GREEN: And with a forewarning such as has now been indicated, is it a good likelihood that Hydro could avoid the ice jams when the possibility of them was high?

MR. BATEMAN: Yes. I think if we were operating a diversion route and let's be perfectly clear on this, we haven't had any experience of operating it in any winter yet, but supposing we are operating it and we get into a bad ice jam condition, then we are going to have to take some corrective action.

Now there are two things we could do, and I might say that an ice jam will not result in instantaneous water elevations occurring back at Nelson House. They will occur over a period of 10 days to two weeks, so I'm told. Now, in that period of 10 days or two weeks, you can either blast the ice jam out or you can shut the flow off at Notigi. So you have two options to you.

Now I know that the . . .

MR. GREEN: Or both.

MR. BATEMAN: Or both. But I know the people that operate the system would be very hesitant about shutting the water off because of the loss in energy, but for a short period of time this is quite feasible.

MR. GREEN: But furthermore, I take it that unhappiness would not carry weight over final authority of the licensing authority . . .

MR. BATEMAN: Right.

MR. GREEN: . . . and the government to say that despite your unhappiness we are trying to avoid an ice jam and you're going to lose some energy.

MR. BATEMAN: Right.

MR. GREEN: That would mean unhappiness but it would not mean an ice-jam.

MR. BATEMAN: That's correct, Mr. Green.

MR. GREEN: Now, I want to take the worst possible situation, Mr. Bateman, because I have to meet the worst possible attacks and therefore I want to deal with the worst possible situation: 30,000 feet with an ice jam which is very unlikely, and which we can avoid, or 55,000 feet with Wuskwatim and no danger of ice jam. Can you give me the water levels at Nelson House?

MR. BATEMAN: I think they were the ones that I gave you . . .

MR. GREEN: No, not the ones that we had last time. I'm talking 30,000 feet with an ice jam which is very unlikely and which we can avoid, as against 55,000 with Wuskwatim which wasn't supposed to be there but in order to have the worst possible argument, I'd like to have that presented.

MR. BATEMAN: Well, let me give you some information here. The water flow, if we look at the Churchill River diversion in operation only at two flows, one with 34,000 and the other with 55,000, the open-water condition at Footprint and Three Point Lakes which is the Nelson House reserve area, would be 799 and 805. Now these, you'll notice, are slightly different than the previous figures but these are open-water conditions.

MR. GREEN: Right, open water, that's right. Now let's get that straight. That would be 7 . . .

MR. BATEMAN: 799 for 34,000 and 55,000 would give 805.

MR. GREEN: Which is six feet higher, not lower.

MR. BATEMAN: Yes. Now under normal ice conditions that 34,000, according to the engineering computations, would indicate, would normalize an elevation of 811 with the 34,000 c.f.s. or an elevation of 821 with the 55,000 c.f.s. These are the two conditions I just previously gave to you.

MR. GREEN: Right.

MR. BATEMAN: Now under an extreme ice jam condition with the Churchill River diversion only, that elevation could go as high as 819 for the 34,000 but 828 for the 55,000. So there is a . . .

MR. GREEN: Yes, but now I want to take away the ice conditions at 55. Say that you have your best possible position with 55, that means including the Wuskwatim stabilizer, then we are at 821.

MR. BATEMAN: Well, if we develop Wuskwatim to 810 which is what we would like to develop it to minimize the ice-jam conditions, we get an elevation under normal ice conditions, not ice-jam conditions, but under normal winter ice conditions, 55,000 would give 815 elevation and the 34,000 would give 812. So there's a three foot difference with Wuskwatim developed to 810 elevation.

MR. GREEN: But then my reading of it is that 55,000 feet with Wuskwatim, that your maximum water height would be 817.

MR. BATEMAN: 815 with . . .

MR. GREEN: Excuse me, 815.

MR. BATEMAN: 815 with the 810 elevation at Wuskwatim.

MR. GREEN: With 810 at Wuskwatim.

MR. BATEMAN: Yes.

MR. GREEN: And that your maximum water conditions including the worst ice jam is not expected, would be 817 or 818?

MR. BATEMAN: No, no.

MR. GREEN: With 35,000.

MR. BATEMAN: With 35,000 Churchill River diversion only, without Wuskwatim, and I haven't got a figure for an ice jam condition elevation at Wuskwatim, we'd have 819.

MR. GREEN: 819 as against 815.

MR. BATEMAN: As against 815.

MR. GREEN: So the worst possible situation is that with an ice jam that we could avoid we'd get to 819 whereas if we had Wuskwatim and 55,000 feet we'd have 850.

MR. BATEMAN: Right.

MR. GREEN: Which is slightly lower.

MR. BATEMAN: Slightly lower.

MR. GREEN: But that is presupposing that Wuskwatim went in with the Churchill River program at 55,000 feet which it was not immediately a part of?

MR. BATEMAN: No, but it was earlier in the schedule than it is in the present schedule.

MR. GREEN: And it also presupposes that you can do nothing about the ice jam which is not a proper assumption.

MR. BATEMAN: Well, that's correct.

MR. GREEN: And with an ice jam, if one was examining the 55,000 feet per second scheme and had an ice jam and Wuskwatim was not there, then we would be up to the range of 830 feet - 821 plus 8 feet - or 829.

MR. BATEMAN: Well, I haven't got those figures, Mr. Green, and I can tell you that the engineers are quite concerned about what the level of ice jam would result in on that stretch of the rivers.

MR. GREEN: Well, then would it be a fair statement to make that given what can be reasonably expected, a prudent operation of the program, that there will be lower water at Nelson House under the 35,000 cubic feet per second scheme than there would have been at the 55,000 cubic feet per second scheme even including Wuskwatim?

MR. BATEMAN: Yes, that is correct.

MR. GREEN: That's fine.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Mr. Chairman, I'd like to ask a couple of questions which flow from the last series of questions. In a nutshell, if looking at the worst possible combination of scheduling and circumstance, there would be a 4-foot negative or disfavoured differential as between the 55,000 c.f.s. as opposed to the 34,000, if that is the worst possible combination, would it be correct to say that the best possible combination would be a favourable differential as between the two schemes of something in a band of 6 to 10 feet?

MR. BATEMAN: Yes, I think that's a generality that's standing up under detailed engineering questions. I think that's a reasonable generality to make.

MR. SCHREYER: Well it's a generality, Mr. Chairman, that is the converse of the generality as to what is the worst possible combination because that is a generality, too. I don't quarrel with the hypotheses that's arrived at in terms of the disfavoured 4-foot differential under the worst possible programming and, you know, the worst possible programming in scheduling, negative or disfavoured of 4 feet; taking the converse, it's a favourable differential of 6 to 10 feet. I won't dwell on that point.

I want now to go on to ask Mr. Bateman, to save me time to go back to my files, to indicate that when Wuskwatim was scheduled for construction under the 55,000 c.f.s. scheme, what year was it scheduled for commencement of construction and going onstream, either/or? Do you have a date in mind?

MR. BATEMAN: I'll have to refer to Mr. Goodwin who was in planning at the time here. Actually, I have provided you this information, Mr. Premier, so I'll read from some of the information I have provided to you.

A review of the load forecast made by Manitoba Hydro in the period '66 to '68 when details of the high level Churchill River diversion were being settled shows that the generation developments then in hand, including the Kettle Station, would have been sufficient to supply Manitoba's power requirements through the winters of '79-80.

You recall, I think I mentioned last year and again this year, that we had finished the Kettle Plant well ahead of schedule as it was originally contemplated. It was a very big development for Manitoba Hydro to undertake in those days. And we contemplated the 12th Unit going in in '79-80 and therefore the earliest date at which Wuskwatim would have been expected was 1980, or eight years after, the then expected in-service date for Churchill River diversion, which was then assumed to be 1972.

The report on Burntwood Power sites by the Gibb-Underwood-McLellan Consulting Company, dated March, 1966, specifically refers to the need to construct a Wuskwatim site with Churchill River diversion already in operation.

So they were recommending the construction of the Wuskwatim site.

MR. SCHREYER: Well then, Mr. Chairman, since I'm only a layman in these matters, I would prefer to have someone else confirm an impression, and that is that under the most optimistic forecasts of load growth and the assumptions that were being made on that basis with respect to scheduling of construction on the Nelson and Burntwood, that there would have been, without exaggeration, a period of five or six, possibly seven or eight years, in which Wuskwatim would not have been in existence after the Churchill River diversion had gone operational. Is that approximately correct?

MR. BATEMAN: That is correct on the basis of the load data that was then known relative to the projected rate at which Manitoba Hydro was growing. Now as you know, subsequently we have grown much faster. So that time period perhaps would have shrunk, but by the same token we couldn't foresee that at that point in time.

MR. SCHREYER: An increase in the pace of load growth from, let us say, a trend projection of four or five percent increasing that, in the light of experience, to a projection of 6 or 7 percent would have made a difference of, you're suggesting, of what? Perhaps one year, two years at the most. . . . that made a difference of four years, that increment of 1 percent in low growth.

MR. BATEMAN: One percent in low growth? I'd have to look at the figures, Mr. Premier, to give you an indication because don't forget that 1 percent of 2,000 is a much bigger number than 1 percent of 1,000 which we were talking about back 10 years ago, less than 1,000.

MR. SCHREYER: I'll put it in a slightly different way. At the time when the specs had been prepared and issued calling for tenders on Missi, at that point in time, was Wuskwatim anything more than a concept? And by that, I mean, had engineering, detailed engineering designs been started on Wuskwatim?

MR. BATEMAN: No, we had no detailed engineering design. We had done just a relevantly cursory examination of the river. We have been spending money, even as recently as last year, and are proposing to spend some more money this year in evaluating the design requirements for the Wuskwatim stie.

MR. SCHREYER: So, on that basis then I am assuming, and I would like to be corrected if it is a grossly incorrect assumption, that there would have been if not a period of six to seven years because of an increase in the curve of load-growth and load-growth projections, that what might have been a period of six to seven years hiatus between the going into operation of the Churchill River Diversion and completion of Wuskwatim, is that this at most could have perhaps changed to a hiatus of only three or four years. In which case for that period of three or four years, there would have been CRD at 55,000 c.f.s. and under a "no Wuskwatim", at least for three or four years, and under extreme ice conditions, a level of 828 feet - plus or minus.

MR. BATEMAN: Yes, that is correct Mr. Premier. And I think while Wuskwatim was a favourable site to develop, there were other reasons why perhaps First Rapids may have been developed first at the lower reach of the Burntwood River, because it would stabilize the water elevations through the Town of Thompson; and with 55,000 going through one month and nothing the next, we would have had a very unsatisfactory riverbank appearance through the Town of Thompson. Consequently there would have been, I think, pressure from the licensing authority to insist that we develop the First Rapids site first; to stabilize those water levels through the Town of Thompson, even though it wasn't necessarily the most economic site to develop first. But these other ecological matters and public relation matters may well have outweighed the desire to develop the cheapest site first.

MR. SCHREYER: My last question, Mr. Chairman, is perhaps one that can best be answered by a constitutional expert. But given that under the most extremely disadvantageous conditions and terms of comparison which Mr. Green led us into in terms of conceptualizing the problem, that at 815 feet as compared to 819 feet which is the worst possible comparison, with respect to the extent to which either of those two intrude on treaty land at Nelson House, is the difference anything other than academic, in that both have one thing in common and that is some footage, some footage of intrusion if you like on Reserve land. Whether it's an intrusion of seven feet or nine feet or 11 feet becomes only a difference of degree, not a difference in law.

MR. BATEMAN: I'm not a constitutional expert, Mr. Premier, but I would agree with the observation you've made.

MR. CHAIRMAN: Mr. Green.

MR. GREEN: Mr. Chairman, if I can just follow that a little further with regard to the problem affecting reserve land. The extreme ice condition that we are talking about at 34,000 feet which you say you could probably avoid or that there's a good chance of it being avoided, if it was avoided then normal ice at the Churchill River diversion at Nelson House would be 811 feet. That would be the normal, the highest water level under normal circumstances. And the best condition that Wuskwatim could produce for 55,000 feet which would be normal, that is the ongoing and not a sudden flush of water but continued flooding of water, would be 815 feet. So what you are talking about at Nelson House is steady water at 815, even with the best conditions that have been referred to by the people who have pursued this, as against 811 steady water at its highest level on those same reserve lands.

MR. BATEMAN: Against a fluctuating water level.

MR. GREEN: Yes. 811 would be the highest normal ice condition with the 34,000 cubic feet per second - normal ice at these 811 feet.

MR. BATEMAN: Normal ice, 811 at 34,000, that's correct.

MR. GREEN: And the best condition at 55,000 with Wuskwatim is 815?

MR. BATEMAN: The best condition with Wuskwatim at 810 is 815.

MR. GREEN: 815. So then we are talking about a steady level . . .

MR. BATEMAN: I beg your pardon, Mr. Green. The best condition with Wuskwatim at 810, with 34,000.

MR. GREEN: No, I'm not talking about that. I'm talking about the 55,000 cubic feet per second.

MR. BATEMAN: All right. 55,000 then is 815.

MR. GREEN: Then we are talking about 815, which is steady water for considerable periods of time, that is a stable water level, in that community as against 811, which is the worst steady water condition. And when I say "steady water condition" I say it as distinct from an ice jam which brings a flush of water which then goes away. So again I have to ask a naive question: Will 815 feet flood more reserve land than 811 feet?

MR. BATEMAN: Well, Mr. Green, you have asked some very interesting questions here, which I would think might best be demonstrated by modeling this whole operation. Now I would like to announce to the Committee and I would like to invite the Committee, and anyone else who wishes to attend, to see the model of this very area that we have had made, which can simulate these water level conditions, and this model is available in Room 234 of the Legislative Buildings here, set up; we're ready to operate it when your Committee adjourns, and I think you can get the differences in elevation visually as opposed to all these figures which become rather nebulous in the mind.

MR. GREEN: You mean that I might actually be able to see that 811 feet of water is lower than 815 feet of water.

MR. BATEMAN: I hope you will, Mr. Green.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Well, Mr. Chairman, just to digress, partly digress from the series of questions with respect to water levels on the Burntwood, I would like to ask Mr. Bateman again, so as to obviate the necessity of going back to the Task Force Report figures in there which I at one time was really quite familiar with: when Mr. Craik was asking about the comparative production of energy with respect to the Nelson development, I think he was concentrating on the comparative output of energy on the Burntwood in particular, and I believe you indicated that except for the small difference in head at Notigi, the energy output would be the same.

MR. BATEMAN: Relatively the same, yes.

MR. SCHREYER: But taking together, in terms of globally, the entire Nelson development, what is the differential in energy as between Lake Winnipeg Storage being present the way it's now being constructed for, or Lake Winnipeg Regulation being completely absent and going to a 55,000 cubic foot per second scheme storage on South Indian Lake only? The Task Force Report had a very clear chart showing the various outputs of energy under different conditions of channel capacity, etc. Do you have the all-up, the all-in, so to speak, comparison of energy output when all plants on the Nelson and Burntwood are completed?

MR. BATEMAN: I didn't bring a copy of the Task Force Report with me, for the first time, Mr. Premier. I've been coming to these Committee meetings - I thought that perhaps we'd got past that subject, but I . . .

MR. SCHREYER: Well we got on to the subject of comparative energy output and I think it would be misleading to leave this meeting without harking back to the numbers which indicate the differential in global energy output as between the 55,000 c.f.s. scheme South Indian Lake Storage only, as opposed to the Lake Winnipeg Regulation four foot drawdown plus Churchill River Diversion 34,000 c.f.s.

MR. BATEMAN: Well, just to generalize on this, there's no question at all about the improvement in the system with the Lake Winnipeg control in effect. You can now utilize that energy that's represented by the storage in Lake Winnipeg at the most favourable time of year when our energy prices are highest and our need is greatest, and that is in the winter-time, as opposed to the uncontrolled situation you'd have had the high flows going out of Lake Winnipeg in the summertime and the low flows then going out in the wintertime when the ice cover occurs, and you would be forced to release your high flows out of Churchill River to compensate for some of the reduction in flow on the normal outflow of Lake Winnipeg. I think, by and large, it did show a better utilization but I would like to refer to the Task Force Report again. I'm sorry I don't have a copy with me and I don't recall the details of that

(MR. BATEMAN cont'd) specific portion of the Report. But you're quite correct, Mr. Premier, in your observation. As you say, a layman's observation, it stands to reason that with control and control of the time and the sensitivity of the load-curve that we have to temperature, that it is more valuable water when released in the wintertime than when released in the summertime.

MR. CHAIRMAN: May I suggest possibly that that particular information you could make it available to the members of the Committee and we could distribute it.

MR. BATEMAN: All right.

MR. CHAIRMAN: Can we proceed? Page 3. Mr. . . .

MR. CRAIK: Mr. Chairman, I asked you about three times to put my name on the list.

MR. CHAIRMAN: Mr. Craik, you were asking a certain number of questions and you indicated that if there are other people who have questions along the same line that you would allow them to continue those questions. Now you seem perturbed that I didn't recognize you. I have you down here on the list.

MR. CRAIK: Well it's not on page 4 or 5 or whatever you're going to, it's on the last topic, and I simply wanted to ask a couple of questions on it.

MR. CHAIRMAN: Well you may proceed.

MR. CRAIK: Thank you, Mr. Chairman. Mr. Bateman, you made reference to the 1966 Gibb-Underwood Study, in relation to the Diversion levels. There's no indication in there, in those levels, indicated of the problem at Nelson House.

MR. BATEMAN: You're absolutely correct. The engineering hadn't been done. There were a lot of assumptions made.

MR. CRAIK: That was with the Wuskwatim Dam in though. It showed it with the Wuskwatim Dam in and it shows no levels that are near the levels indicated by you here today.

MR. BATEMAN: Just because, Mr. Craik, the engineering had not been done. We were taking quite a few things for granted, I'm afraid.

MR. CRAIK: So you're saying in fact, then, that studies were incomplete at that time and there's been further information to date that makes them invalid.

MR. BATEMAN: Yes. Sufficient field information was not available upon which to make definitive engineering judgments, but the best engineering judgment was made on the basis of the field survey data that was available.

MR. CRAIK: I don't have any more specific questions on that. I have another couple of questions here I wanted to ask you. The first one is in relation to your announced rate increases that are to take effect in April. Will these rate increases still go ahead, in light of the agreement between City of Winnipeg Hydro and Manitoba Hydro?

MR. BATEMAN: Yes, the rate increases will go ahead, Mr. Craik. We have an agreement, and you're referring to the City of Winnipeg where if we can't . . . We thought we had agreement with the City on the rate increase. We had agreement with City Hydro on it. We are quite prepared in the terms of that agreement to refer it to the Public Utility Board for an adjudication, but in the meantime we will proceed with our rate increase, and if the Public Utility Board indicates that we should have charged higher, then of course we will charge higher at that time. If, on the other hand, they indicate that we should charge less, then we will credit our customers with what we have charged them as an interim payment on their rates. But my feeling is, based on what I know about the information that's in our financial accounts, that the Public Utility Board will likely come back and tell us that we should charge more. I don't want to pre-judge what the Public Utility Board will do, but you recall that we have a very good precedent for this back in 1970 when we did refer it to the Public Utility Board, the 1968 rate increase. They did come back in 1970 after a very exhaustive study, and they did tell us that we didn't raise the rates enough, and the reasons why they made that statement then are just as valid today as they were then. We don't have a 1.25 interest coverage, we have less than a 1.1 interest coverage. So I would think that if the Board examines the accounts, they would probably tell us that they should be raised more now. As I say, I don't want to pre-judge what the Board will do.

MR. CRAIK: Well aren't you really, in effect, prejudging them both?

MR. BATEMAN: No, I'm not prejudging them.

MR. CRAIK: Not only the Public Utilities Board but the City of Winnipeg. If the City of Winnipeg is opposed and your agreement says that you have to have mutual agreement, and if you can't solve it it goes to the third party, which is the Public Utilities Board . . .

MR. BATEMAN: We also have legislation that says we shall charge equal rates. We can't break the law.

MR. CRAIK: Well, if you raise your rates, one of you is breaking the law.

MR. BATEMAN: No. No.

MR. CRAIK: You're charging different rates. Mr. Chairman, somebody has to be violating the law if the law says you must charge equal rates and you're charging two different ones. It's a question of who's doing it.

MR. CHAIRMAN: Mr. Green.

MR. GREEN: Mr. Chairman, I hardly think that we should have a debate on what the law is.

MR. CRAIK: We just finished one on engineering. We might as well go into law.

MR. GREEN: That's right. I hesitated to even ask questions without displaying and admitting my own ignorance in the field when you were dealing with the engineering questions, but with the legal questions the only display of confidence which I would claim over you is that I can say that the law is uncertain where you appear to think that it's quite clear. And I say that as a lawyer.

MR. CRAIK: Well, I suppose this will have to be settled by the lawyers, but the lawyer's indication from the City, Mr. Lennox, is pretty specific with regard to the fact that if the two cannot agree it must go to the Utilities Board, and then also he doesn't mention the fact that you must charge identical rates, but we're aware of that from the Act as well. So what Mr. Bateman is essentially saying, you're firing ahead and let the lawyers sort out the problems as they arise.

MR. BATEMAN: Well I think that what I have to do is accept the responsibility for running Manitoba Hydro in an efficient, proper manner, with balanced accounts at the end of the year. I'm not going to do that if I can't raise the rates, when we said we needed the money on April 15th and we'd be into a deficit position at the end of our fiscal year if we don't get this additional revenue.

Now I've also said that if we are told by the Public Utility Board in their adjudication that we are charging too much, we will allow a credit on our customers. On the other hand, if the Public Utility Board comes back and says we should charge more, then the board of Manitoba Hydro would have to re-assess its present position as to whether or not it should charge more this year or add that into next year's rate increase.

MR. CRAIK: How long is it likely to take the Utilities Board to reach a decision?

MR. BATEMAN: I can't speak for the Utilities Board on this, Mr. Craik. In 1968, when it was referred to the Public Utilities Board, I think the referral was made either late '68 or early '69 and we received the final ruling in 1970. Now I don't know whether that would take the Board that long because they had done a great deal of that review. It could be perhaps they could review their present status, I don't know. I can't speak for the board. That is, the Public Utility Board.

MR. CRAIK: Yes. Well, Mr. Bateman, apart from the fact that you see your responsibility as balancing your books, I think you've also acknowledged some doubt as to whether you may or may not be guilty to breaking the law here, and I wouldn't think you would want to go on very long in this area of doubt. Now either the law has to be changed to make it more adequate or we shouldn't have a major utility faced with this situation where they in fact have to, you know, defy the statutes which created them in the first place in order to carry on what they think is their responsibility. Now, I really think you should either be . . . You know, this may not even be a decision that should be in your hands but should be in the hands of the Legislature as to whether or not this should not be changed, but I would think that you would want to think twice about defying the statute until such time as it is changed.

MR. BATEMAN: I don't think I'm defying any statutes, Mr. Craik. I have had legal advice on this particular situation that we're in now, and I am happy to say that the course of action that we're following seems to be satisfactory from a legal point of view. Now, maybe you're right. Maybe the statutes should be revised to relate to the equalization of rates, but that's something that you and your confreres are going to have to deal with.

MR. CRAIK: Okay. One other different question, Mr. Chairman, with regards to this cutoff on the natural gas supply for the next two years. In the increases in the growth of Manitoba Hydro, is this accounted for in predicting your growth over the next two years?

MR. BATEMAN: Yes, we're factoring some of that into our growth picture.

MR. CRAIK: Isn't this taking all the houses that would normally have gone to natural gas, which would be the majority, certainly would be in the urban area anyway, under normal conditions - if there's no more new connections allowed in the next two years, this probably shifts most of those right over on to electricity.

MR. BATEMAN: But that isn't a big load, Mr. Craik.

MR. CRAIK: It won't have that substantial an effect on your total.

MR. BATEMAN: No. No, it'll help maintain the rate of growth in the residential areas. As a matter of fact, the residential area at the end of the year is growing at the rate of about 8 percent, which is a little bit higher than our total growth. But as fast as the contracting industry can convert homes, I think we can get the facilities ready to supply them.

MR. CRAIK: What about other areas other than residential? Is the shortage in gas supply like interruptible, is it having an impact on Hydro demand?

MR. BATEMAN: Interruptible? You mean the shortage of interruptible gas?

MR. CRAIK: Yes.

MR. BATEMAN: I don't notice any major effect on that. I also observed that our commercial load, which may be one of the reasons, is growing a little bit better than our average rate of growth right now.

MR. CRAIK: Your growth rate that you've projected, what are you predicting, say, over the next 3 years?

MR. BATEMAN: Well, we're predicting a modest increase next year of something in the order of 6 percent, perhaps a little less, but our long-term, our 10-year horizon, looks like we'll net out a little bit above 7 percent again.

I think as these other non - well, as these fossil fuels - the oil and gas rates go up, the present swing to electric, which we notice is accelerating, will accelerate still faster and will help to maintain some growth on our system.

MR. CRAIK: Yes. But anyway your prediction . . .

MR. BATEMAN: But just to finish that thought, Mr. Craik, our prediction also was that despite the rate increases that Manitoba Hydro is going to place into effect, which we have placed into effect this year and which we will place into effect next year, will still result in electrical energy being more than competitive with oil, and competitive in some cases with gas - and particularly more competitive as their rates go up faster than ours go up, which is the prospect we face.

MR. CRAIK: Yes. You said that you expected that there would be another major rate increase next year and then you hope that things would level off somewhat.

MR. BATEMAN: That is correct.

MR. CRAIK: What do you mean by a major rate increase? For this year or . . . ?

MR. BATEMAN: Well, I would think something, I hope not as much as this year, but it could be as high as this year, but preferably we'd hoped it could be less. And the following year then hopefully we'd be into a very modest increase, if any.

MR. CRAIK: Like 10 percent?

MR. BATEMAN: Oh, no, I'm not going to commit myself to that, Mr. Craik. I mean, projecting these accounts ahead that far with any degree of accuracy is a task that I know no one is capable of performing. We keep doing this every month or two and we have a good financial model of the corporation, but nevertheless it's not prudent to disclose what those results are until we get more definitive information.

MR. CHAIRMAN: Mr. McBryde.

MR. McBRYDE: Well, Mr. Chairman, my question relates to rates as well, and I wonder if I could have some assistance in interpreting the piece of paper, or the papers we were given on the new rates.

The residential Winnipeg standard, what's the difference between that and the next page which is the residential Winnipeg all-electric?

MR. BATEMAN: Well, there is a special rate for all-electric in Winnipeg which I would hope would be phased out within the next year. As you know, Winnipeg Hydro, when the Central Heat went out of business in the River Heights area and in west Winnipeg, they put in an all-electric rate to attract customers to electric heating. They didn't attract many but they did have a preferred rate. That differential has been narrowed each year that the rates have been adjusted, and presumably next year it would be eliminated as a preferential rate. We had no such preferential rate in the rest of the province.

MR. McBRYDE: Just in Winnipeg?

MR. BATEMAN: Just in Winnipeg.

MR. McBRYDE: Then we get over on the next page, you have a Brandon-Portage-Selkirk rate, and then a Dauphin-Thompson-Flin Flon rate, and then a town, village and rural rate, how do you make the distinction in those categories? What's the magic separation between . . . ?

MR. BATEMAN: The size of community. You'll notice that Brandon, Portage and Selkirk on the old rate was different than the towns of Dauphin, Thompson and Flin Flon, whereas on the new rate they're identical; that the large communities are now all on the same rate.

MR. McBRYDE: I'm sorry, I must be reading this the wrong way.

MR. BATEMAN: Well, if you look at - I haven't got the page numbered, but it's headed up "Residential Brandon, Portage and Selkirk," you'll see the Rates Present: '75 at .06, and '75 now at .072. What we're saying here is that the proposed rates for Brandon, Portage and Selkirk are the same as the proposed rates for Dauphin, Thompson and Flin Flon, whereas the rates last year for those two communities were different. What we're doing here is again consolidating rates. We had too many rates.

MR. McBRYDE: I see.

MR. BATEMAN: And we're now, the City of Winnipeg has one rate; above that is the rural centres of large size, such as the cities you've named, and then all of the smaller communities and rural areas are on the third rate. If you have a rate card there . . . Give Mr. . . .

MR. McBRYDE: That's on page 3 then - from page 3 and 4 you can tell that the two rating areas or categories are being combined . . .

MR. BATEMAN: Yes.

MR. McBRYDE: . . . of those two. What is the magic number, or the magic formula between the town, village and rural, and then moving into the Dauphin, Thompson, Flin Flon category?

MR. BATEMAN: The magic number between the town, village and rural?

MR. McBRYDE: Yes.

MR. BATEMAN: And what?

MR. McBRYDE: And the next category which is Dauphin, Thompson and Flin Flon, or larger rural areas, I guess you'd call them.

MR. BATEMAN: There's a small difference in rate and I'll dig out my rate schedule here which I like to carry to answer questions on rates.

The overhead service for Winnipeg, for example, in the first 75 kilowatt hours, is 4.8 cents. It's the same whether you're all-electric or standard. When you go to Dauphin, Brandon, Flin Flon, Portage, Selkirk or Thompson, the first 75 kilowatt hours are 7.2 cents. When you go to rural towns and villages or isolated areas or standard diesel, it's all 7.9 cents for the first 75 kilowatt hours.

Now the next 175 kilowatt hours are the same in Winnipeg whether you're all-electric or not.

MR. McBRYDE: Could you tell me where you're reading from so I can follow you?

MR. BATEMAN: Yes. On the top group of lines there, the overhead service, you'll notice, Winnipeg, Standard and so on. Well, you'll notice the next 175 kilowatt hours, which is the second line, you'll notice it's 1.7 cents in Winnipeg whether you're all-electric or not; 2.2 cents in those other large cities of Brandon, Dauphin, Portage, Selkirk, Thompson, etc., and the rural towns are 2.6 cents, the same as the isolated areas or the diesel areas, 2.6 cents.

Now the balance of the kilowatt hours, that is the run-off rate, so to speak, it's 1.23 cents in Winnipeg; and if you have an all-electric house you get a slight benefit, and that's the only place where you get the benefit for the all-electric service, is 1.2 cents as opposed to 1.23 cents.

Now in the other centres, the Dauphin, Brandon, Flin Flon, Portage, Selkirk and Thompson, the balance of the kilowatt hours run at 1.26 cents, so there's a .04 cent difference between the Winnipeg all-electric rate and a .037 cents difference between the others. A very small difference, nevertheless they are differences. The rural towns and villages and isolated diesel areas and so on, it's 1.3 cents a kilowatt hour. Now we have the minimum bill,

(MR. BATEMAN cont'd) as you notice, across the page, but in the isolated areas the minimum bill is higher than it is in any of these other areas.

MR. McBRYDE: So the isolated and diesel standard are the same except for the minimum bill.

MR. BATEMAN: That's correct.

MR. McBRYDE: How do you draw a line between the Brandon-Dauphin and the rural towns and villages?

MR. BATEMAN: Number of meters. If you have 2,500 meters, I think it is, in a town, then it qualifies as a town the size of Dauphin or Portage.

MR. McBRYDE: In that calculation of meters, for example, a trailer court, each connection would count as one meter or . . . ?

MR. BATEMAN: I don't know. Is that the way we do it, Harvey? Residential only. It's the number of residential meters. A commercial trailer court wouldn't qualify because it's a commercial operation.

MR. McBRYDE: Do you have an idea of - I'd like to be very specific - how many meters residential you have within the Town of The Pas?

MR. BATEMAN: The Town of The Pas? Mr. Frazer says it's 2,163. So when The Pas grows a bit bigger it'll qualify for the rate.

MR. McBRYDE: How many would you have in Flin Flon?

MR. BATEMAN: Mr. Frazer says 2,878 meters, residential meters, in Flin Flon.

MR. McBRYDE: Now within a category, like we know how Autopac calculates within each category by costs, etc., now does Hydro use some sort of similar approach within each category to calculate their economic return, or that area pays for itself? How do you . . . ?

MR. BATEMAN: There are a number of factors like that that relate to setting rates. Yes, it's the cost of service and we try to keep the rates such that they will pay for the cost of service to the area.

MR. McBRYDE: So in some cases, like the diesel under "isolated", those communities cost - I don't think Hydro recovers and that's the way I believe it should be, that in fact they are subsidized to some extent, that they are subsidized then within a category rather than across the board.

MR. BATEMAN: Yes. In the isolated diesel areas, we charge provincial government agencies that are in there or federal government agencies that are in there the full cost of service, but the only limitation that we have on the other customers in those isolated communities supplied by diesel, are that they can't use an unlimited amount. They have a limit of a 10 ampere service, and that is because the cost per kilowatt hour is so high that it's much better to burn oil, for example, for heating in those areas where we have to haul the oil in than it would be to burn it in a diesel plant and then use the heat in an electric heater. We will not sell or condone electric heat in isolated diesel communities, but we will give them the same rate that they could get anywhere else in Manitoba, and therefore they are subsidized by the rest of the customers.

MR. McBRYDE: Okay then, to operate at a break-even point, where do you pick up that subsidy?

MR. BATEMAN: On the rest of the system.

MR. McBRYDE: That's picked up throughout the system and not just within one category. The rural town villages isolated in diesel standard aren't all calculated to pick up part of that?

MR. BATEMAN: That's right.

MR. McBRYDE: Do you have some sort of indication and figures for your calculations as the average amount of electricity consumed by a trailer as opposed to other type of residence?

MR. BATEMAN: No, but I could ask Mr. Chatterson, our Manager of Rates Department, if he can tell us whether he has a handle on that, whether a trailer uses more electricity than a standard residence.

MR. CHATTERSON: A standard residential customer in Winnipeg will run 600 kilowatt hours whereas a trailer - I don't have any specific data on that, but if they are standard and not electrically heated they will run closer to 200 or 250 kilowatt hours per month.

MR. BATEMAN: That would indicate about a third - a little more than a third consumption.

MR. McBRYDE: Yes. Compared to the two of those figures that were given.

Could you give me - maybe it's in here and I can't understand it - on each of these pages of the white sheets there's a little blotch on there which I suppose indicates something and I'm not sure what.

MR. BATEMAN: That's the average bill that's indicated there.

MR. McBRYDE: How do you figure that out? I don't understand what . . .

MR. BATEMAN: Mr. Chatterson just indicated that the average home uses about 600 kilowatt hours in the city. You'll notice that the average home in the country uses a little more, it's about 700 kilowatt hours. These are average numbers.

MR. McBRYDE: I see.

MR. BATEMAN: The only way really to tell what your increase is going to be is to look at the number of kilowatt hours that you have on your last bill and then you can run down this left-hand column and extrapolate to what your bill would be.

MR. McBRYDE: Could you save me some mathematics or do you have it handy there the percentages that would go beside those blotches?

MR. BATEMAN: I don't have those figures right now but we could easily work them out for you if you would like.

MR. McBRYDE: Yes. If you could just give me those.

With the bills that went out recently -- I'm sorry I didn't quite understand that, I was under the impression last week that the new rates started after April 15th, but that's the first bill on new rates.

MR. BATEMAN: No, April 15th - meter readings after April 15th. That's when these rates go into effect. Or meter readings on April 15th, I've forgotten how it's worded. Is it meter readings on April 15th?

MR. : Yes. On and after April 15th.

MR. BATEMAN: Yes. On and after April 15th.

MR. McBRYDE: The bills that went out to individual hydro users had a percentage on them. Now that would have been somebody taking their use and putting a percentage on it or would that have been the average percent for that area? -- (Interjection) -- The people of The Pas when they got their last bills got a little form inside that said, the increase will mean to you - one person I talked to said 7 1/2 percent. Now would that have been calculated on the average or on that individual's past consumption? What percentage increase he would have.

MR. BATEMAN: I don't know the answer to that, Mr. McBryde, but we'll ask Mr. Chatterson if he could indicate or is Mr. McKeen(?) - Mr. Chatterson, could you do that?

MR. CHATTERSON: Because of the fact that they got one bill at the old rate or at the present rate and they got a statement which contained the new rate that will become applicable as of April 15th, then they were able to calculate their new bill at the new rate and thereby determine how much the increase would be. They had that kind of accommodation within the envelope.

MR. McBRYDE: So that you just took their last bill and said, on the basis of your last bill if the new rates applied it would be so many percentage.

MR. CHATTERSON: No, that's what they must have done because we did not include, to my knowledge we did not include any comment with respect to the percentage increase.

MR. McBRYDE: I'm sorry, then I misunderstood because I have one person from The Pas say they actually had a percentage in their envelope telling them their bill would be so much percent more. And then their neighbour who calculated it out said it was 15 percent, not 7 1/2 percent as was contained in the envelope.

MR. BATEMAN: Well it depends entirely - you see they will change, as you can see. The percentage rate will change. If you're a very small user it might be more because of the increase in the step rate. But if you're an average user it would net out something less than the 19 percent.

MR. McBRYDE: As I read this, the white sheet - and maybe if I had the chance to go over this one, could see if it's verified. But as I read the white sheet the discrepancy between the Brandon, Dauphin, Flin Flon rates and the town, rural and village rate is increasing rather than decreasing.

MR. BATEMAN: Say that again, Mr. McBryde.

MR. McBRYDE: The discrepancy between the Brandon-Dauphin rate or the differential as opposed to the rural town and village rates is increasing rather than decreasing. That is

(MR. McBRYDE cont'd) rather than move toward some sort of equalization we're moving away from equalization. . .

MR. BATEMAN: No, I don't think that is true. I think if you compare the Winnipeg rates, what they were last year to what they are this year, you'll find that you've added exactly the same to both.

MR. McBRYDE: Okay. Now what I'm talking about is the Brandon-Dauphin rate as compared with the rural town rate. So if you take the average from the Dauphin-Thompson rate, the average increase is \$1.52. If you take the town, village rural rate the average increase is \$2.43.

MR. BATEMAN: Well don't forget, Mr. McBryde, you must remember that we're consolidating some rates as well this year. So in some of those cities that we had a lower first step rate than we do now.

MR. McBRYDE: But if you take the Brandon-Portage-Selkirk as opposed to the Thompson-Flin Flon the discrepancy is still a . . .

MR. BATEMAN: There's still a modest . . .

MR. McBRYDE: There's still an increase rather than a decrease in the difference. The average \$1.84 for Brandon-Portage as opposed to \$2.43 for town, rural and village.

MR. BATEMAN: If you remember, Mr. McBryde, the cost of service is one of the criteria.

MR. McBRYDE: I just want to make it clear though, that in fact my understanding of this paper agrees with your understanding, that the rate change that you are now bringing into effect is increasing the differential or the discrepancy rather than decreasing it. That is we are making the rates less equal between these two categories rather than more equal between these two categories.

MR. BATEMAN: No, I don't agree that we're making them less equal. We've added - if you look back at Winnipeg you'll see you've added the same rates on the Winnipeg area as you've added, in fact, in some of those steps slightly in excess of what you've added in the rural areas.

MR. McBRYDE: Okay. I'm talking about a comparison between the two categories that come closer together, the Brandon-Dauphin and the rural, town, village.

MR. BATEMAN: The rural, town and village . . .

MR. McBRYDE: If you can explain to me how I misread it because it's very . . .

MR. BATEMAN: Well perhaps I could, instead of taking the whole committee's time on this subject, Mr. Chairman, I could perhaps meet with Mr. McBryde and go over this with him afterwards. Would that be . . . ?

MR. CHAIRMAN: Yes, I feel, Mr. McBryde, that that would be best served unless other members would like to have that . . .

MR. McBRYDE: Well I'll just ask one more question then. It's my impression that the rate increase is greater in rural town and villages than in Brandon-Dauphin and if Mr. Bateman says that's not true then he will have to explain it to me.

MR. BATEMAN: No I didn't say it wasn't true, but I said that there is a modest differential there but we've tried to be as equitable as we can in all categories recognizing that in some of those larger centres we have consolidated rates and perhaps next year if a rate increase occurs it will be more equitably distributed across all the categories of service.

MR. McBRYDE: That would mean that then you would have to change your format. As long as your rate increases are based on the cost of delivery in that rating group . . .

MR. BATEMAN: This is what we try to do.

MR. McBRYDE: Then the discrepancy will increase if the cost is greater to deliver to towns and villages.

MR. BATEMAN: Yes.

MR. McBRYDE: So unless there is a deliberate change of Hydro policy to move towards equalization in those two categories then it wouldn't happen.

MR. BATEMAN: That is correct.

MR. McBRYDE: It would continue to be more and more . . .

MR. BATEMAN: They could. If the cost of supply in the rural areas increased, yes, then we'd have to diverge.

MR. CHAIRMAN: Mr. McKellar.

MR. McKELLAR: Mr. Bateman, I have a couple of questions here I'd like to ask just

(MR. McKELLAR cont'd) for clarification. In the Village of Wawanesa we're building a skating rink and curling rink combined, about \$400, 000 when the artificial ice plant is installed, and we're heating with electricity the whole waiting room - the end to end with the waiting rooms in between - and I was told that there was a change in policy regarding the rating in the off season, I mean from the first of May when the rink is closed down till say the first of October or somewhere in there. Could you explain to what rate will they pay in the off season for that particular rink?

MR. BATEMAN: I'll ask Mr. Chatterson to explain the off season rate.

MR. CHAIRMAN: Mr. Chatterson.

MR. CHATTERSON: In order to make this a detailed answer it gets a little extensive. First of all the new rate, the new rate form is made up of two components: a demand charge and an energy charge. The demand charge component amounts to approximately one-third of the total bill. This is on an average type of load. However, when we - oh, and that demand charge component becomes the basis for determining a minimum bill in the summer months, which is actually 75 percent of the demand charge component will be assessed during summer. However, frequently under the new form of rate you will get a reduction in charges in several of the winter months, an increase in charges during several of the summer months and there will be more than average increase to these types of customers who peak badly during the winter months, the rinks being one of them that are closed all summer.

MR. McKELLAR: Mr. Chairman, this is the one thing that - like they made the decision a year ago to go for electric heat. Maybe they wouldn't have made that decision had they known this was going to come. They got the wiring all in now, there's nothing they can do about it. They hope to get the rink open this particular fall. What you're saying then is the communities that do have artificial ice plants and electric heat in their particular rinks are going to be paying quite a larger sum of money over the whole period of twelve months. How much would that average out? Say they operate the rink for six months and it's sitting idle for six months.

MR. CHATTERSON: Generally speaking the rates are going up, for general service or commercial operations, are going up in the order of 22 percent. This type of operation will go up something probably slightly in excess of 30. It depends though entirely upon the degree of utilization they make even of the wintertime load and whether or not there's any use at all in the summertime. I notice some of those complexes do make considerable use of the facility during summer months and thereby end up with a reasonable increase under the new rate form.

MR. BATEMAN: I think if I could inject here, that the objective that we are trying to achieve is to make sure that you operate your facilities economically. And if you don't have the artificial ice plant combatting the electric heat plants then you will not have a large peak. What we want to avoid are these winter peaks. If we can get the user to conserve on peak time then we're saving money on capacity. And if you don't conserve then you're going to be penalized for the whole year the way Mr. Chatterson has indicated the rate would do. But I also suggest, Mr. McKellar, that the cost of alternative fuel, at the present time I don't think you can compete even with that rate.

MR. McKELLAR: Well I just wanted to clarify this because they've made a decision already and the rink is built and all the wiring is completed, and as I said they're putting in artificial ice, this plant this fall, too; the bill will be fairly large I would imagine, four or five hundred dollars a month, in the winter months anyway. This will you know make a large operating cost.

Now one other thing that I had brought to my attention is the fact, your change in policy on paying your agents around the province, collection agencies, where you relate it from 11 cents, now you pay them 10 and the customer pays 10. And I was wondering if this was good. I'm not an economist but I know what I'm going to do. Instead of paying my bills monthly I'll pay them every second month and now you haven't got my money as quickly as what you would have. When you had the policy of the 10 percent discount I paid mine every month and I paid it in lots of time so you got my money and I had my discount. Now there's no discount, there's no encouragement for me to - I can wait in fact pretty close to 90 days before you're going to cut me off.

Say a third of the people in the Province of Manitoba did that, would that not mean that you - in the long run it would be cheaper to pay that extra 10 cents. And all I'm saying is a

(Mr. McKELLAR cont'd) . . . lot of people are a little perturbed. It isn't only the 10 cents but it's the way it's handled, having to pay this 10 cents over the counter to this collection agency. And I'm just wondering in the long run whether you're going to be better off financially or worse off financially. I would say you'd be worse off, because I know many of the farmers have said they're only going to pay every 60 days instead of paying every 30 days.

MR. BATEMAN: Well there's quite an interesting history to this, Mr. McKellar, and the main pressure for this increase in collection charge comes from the pharmacists in the city, and all utilities in the city, gas, water, telephone, hydro, Winnipeg Hydro have all agreed to not increase the value that we were paying the druggists. We were paying the local drug store 11 cents; they wanted 25. So because the normal charge for collecting a bill with say your oil company or Texaco or Imperial, whatever it is, you have to pay at your bank if you're going to take advantage of paying at your bank, a certain service charge. So what we've done is we told the druggists if they - rather than impose this added charge on all the customers of Manitoba Hydro when less than 50 percent of them pay their bills through such agencies, we felt that it was more proper to let those who want to pay this way to pay the druggist his increased cost or pay the collection agency his increased cost. So we have reduced our payment to the druggist down to 10 cents and he collects ten cents from the person who is using his services to pay the bill.

Now I think that's equitable. I'm not so sure that this won't change again within the year or so. As a matter of fact the pharmacists want considerably higher payment charged. We're quite happy to accept your bill with no payment at any agency that we operate in the province. We'll accept your hydro bill payments at any agency that we operate in the province, with no charge. We can't allow you, or anyone else, to use the slow-payment process to save you the collection charge. I think on overdue accounts you'll find that we do have a service charge on overdue accounts, which will probably be more expensive than not paying it. My suggestion is that if you don't like paying the service charge, drop in at our regional office or district office, and give the man, or mail it in to head office and we'll accept payment there.

MR. McKELLAR: Well, I'd like to mention, in most of the areas, list most of the collection agencies in my area is the local store. In my area that's the ones that collect. It isn't the bank or it isn't -- because most of our towns haven't got banks. They are quite happy, I think, to retain the 11 cents they had before, but they weren't given the choice.

MR. BATEMAN: Well then, maybe what you should do is suggest they not charge you the 10 cents but just collect from us the 10 cents that we've . . .

MR. McKELLAR: Yes, but if you were paying them eleven. They would accept 11; they would accept 11 if you'd give them the option.

MR. BATEMAN: They're getting 10 now, yes.

MR. McKELLAR: So this is the complaint. They said they never asked for any change. They do it as a service, and in turn they sell groceries. So this is the way. --(Interjection)-- Well, that's beyond the point. I don't think there's any . . . Up till now, I don't see any extra charge on my bill for running 60 days. In fact I've got to read my own meter too, so that's . . . on the farm.

MR. BATEMAN: Well the board has authorized extra charges.

MR. CHAIRMAN: (Pages 3 to 16 were read and passed) Page 17 - Mr. McKellar.

MR. McKELLAR: Yes. I was just wondering how you're making out this coming summer obtaining enough men for employment in your hydro development up there. Are you going to be able to get enough men? I was told by one man that you might have to go to even the United States or Great Britain to get sufficient men to . . .

MR. BATEMAN: At the current time, I understand we're adequately - or the contractors are adequately staffed with carpenters and so on, that they have requested. How it will be at the peak of the summer season I don't know, but at the present time it indicates we have adequate staff, or the contractors have adequate staff.

MR. McKELLAR: And there is no danger of any strikes? Or do you have that contract where they cannot strike?

MR. BATEMAN: On our hydro projects we are covered by the Allied Hydro Council Agreement which is a strike-free agreement.

MR. McKELLAR: And the wage scales vary from time to time?

MR. BATEMAN: The wage scales are related to the Winnipeg Builders' Exchange rates of pay.

MR. McKELLAR: And if they get their 80 cents - 80 percent - is it 80 percent - over two years, you've got to pay the same, eh?

MR. BATEMAN: That is correct.

MR. CHAIRMAN: Page 17 -- passed. Page 18 - Mr. Craik.

MR. CRAIK: Mr. Chairman, . . . on the breakdown of interest charges, payroll, and so on. First of all the payroll area, I presume, is just Hydro permanent employees and doesn't involve the contracts on the development work.

MR. BATEMAN: It's non-capitalized labour, yes. It includes more than just permanent employees, though. It includes temporary project employees that are on Manitoba Hydro's payroll directory that are not being capitalized.

MR. CRAIK: Is that interest charge, 42 cents on the dollar, you're capitalizing a lot of your interest charges as you go along. Does that show up there?

MR. BATEMAN: No. That is not - that shows up on the balance sheet. This is interest that's paid out of operating accounts. When a project is declared operational and is put on the operating accounts, then the interest has to be borne by the money we receive for our product.

MR. CRAIK: Any idea of how much interest you're capitalizing at the present time?

MR. BATEMAN: Yes, I think we can find that in the Interest Applied on Construction. The total interest was \$70,700,000, the interest that's capitalized is \$20 million, and the interest income is \$7 million. We'll come to that on Page 22 when the Chairman gets to Page 22.

MR. CRAIK: The total is \$70 million interest charges; 20 million of that is capitalized.

MR. BATEMAN: Yes.

MR. CHAIRMAN: (Pages 18 to 24 were read and passed) Page 25 - Mr. Craik.

MR. CRAIK: Mr. Chairman, on Page 25. Mr. Bateman, I think you did mention that the interest rate that you're now having to pay on, you know, currently, was it around 9 percent you're presently having to pay?

MR. BATEMAN: Well, I said as high as 10. One Canadian issue went at 10 but the last American issue before this last one, the Premier was successful in Puerto Rican, which was around 9 percent. The last big public issue in the U.S. was 9 3/8, I believe it was.

MR. CRAIK: Is the Puerto Rican one 9 percent?

MR. SCHREYER: It's trifurcated. It's five years at 7 3/8 and ten years at 8 1/2, roughly, and if held to 20 years 9.0.

MR. BATEMAN: There's an incentive at the end of each five. At the end of five and the end of ten, if they hold it that long, you get a sort of an extra coupon which raises the average rate. It gives the advantage of short term money at a lower rate and long term money at a little better than the going rate today, in fact considerably better than the going rate today.

MR. CRAIK: Is there any Arab money coming in, directly in for investment in bonds on energy?

MR. BATEMAN: Not that I'm aware of. Mr. Premier, as the Minister of Finance, I'll defer that one to him.

MR. CHAIRMAN: Mr. Premier.

MR. SCHREYER: Not to this date, although there are two utilities elsewhere in Canada that have floated either \$100 million or \$150 million issues that I think quite candidly could be said to be petro dollar sources.

MR. CRAIK: There would be a lot of money come in through other . . . Indirectly it could be petro dollars rather than direct. Is that . . . ?

MR. SCHREYER: Well I think that's true, Mr. Chairman. There is no way to really quantify that for reasons which probably are something Mr. Craik could deduce as well as I. On occasion, the petro dollar lenders don't particularly like to be known to be behind a particular issue. Don't ask me why, but that's the case.

MR. CHAIRMAN: (The remainder of the Hydro Electric Board 23rd Annual Report was read and passed).

MR. GREEN: I move that the report be received.

MOTION presented and carried.

MR. CHAIRMAN: Committee rise, and you are invited to review the model in the Members' Conference Room.