ISSN 0713—9454

Third Session — Thirty-Second Legislature

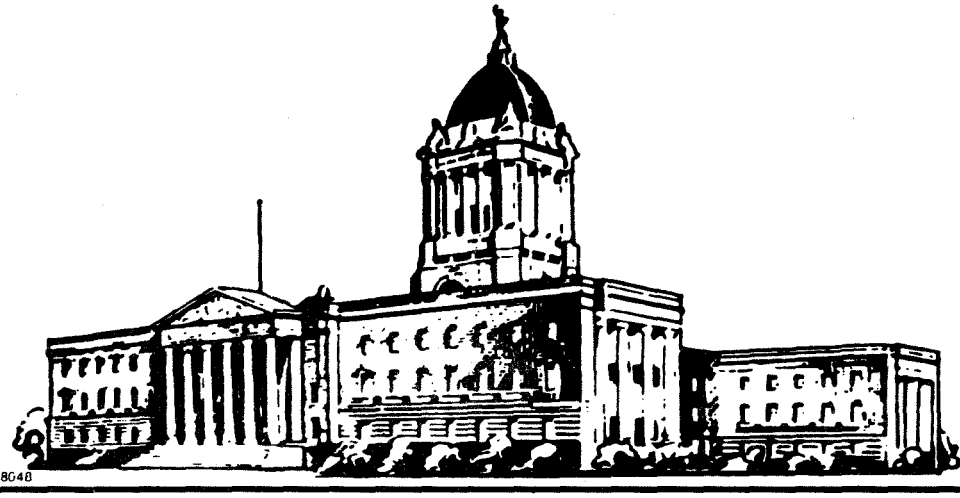
of the

Legislative Assembly of Manitoba

STANDING COMMITTEE
on
PUBLIC UTILITIES
and
NATURAL RESOURCES

33 Elizabeth II

Chairman
Mr. Phil Eyler
Constituency of River East



MG-8048

VOL. XXXII No. 6 - 8:00 p.m., MONDAY, 25 JUNE, 1984.

Printed by the Office of the Queens Printer, Province of Manitoba

MANITOBA LEGISLATIVE ASSEMBLY
Thirty-Second Legislature

Members, Constituencies and Political Affiliation

Name	Constituency	Party
ADAM, Hon. A.R. (Pete)	Ste. Rose	NDP
ANSTETT, Hon. Andy	Springfield	NDP
ASHTON, Steve	Thompson	NDP
BANMAN, Robert (Bob)	La Verendrye	PC
BLAKE, David R. (Dave)	Minnedosa	PC
BROWN, Arnold	Rhineland	PC
BUCKLASCHUK, Hon. John M.	Gimli	NDP
CARROLL, Q.C., Henry N.	Brandon West	IND
CORRIN, Q.C., Brian	Ellice	NDP
COWAN, Hon. Jay	Churchill	NDP
DESJARDINS, Hon. Laurent	St. Boniface	NDP
DODICK, Doreen	Riel	NDP
DOERN, Russell	Elmwood	IND
DOLIN, Hon. Mary Beth	Kildonan	NDP
DOWNEY, James E.	Arthur	PC
DRIEDGER, Albert	Emerson	PC
ENNS, Harry	Lakeside	PC
EVANS, Hon. Leonard S.	Brandon East	NDP
EYLER, Phil	River East	NDP
FILMON, Gary	Tuxedo	PC
FOX, Peter	Concordia	NDP
GOURLAY, D.M. (Doug)	Swan River	PC
GRAHAM, Harry	Virden	PC
HAMMOND, Gerrie	Kirkfield Park	PC
HARAPIAK, Harry M.	The Pas	NDP
HARPER, Elijah	Rupertsland	NDP
HEMPHILL, Hon. Maureen	Logan	NDP
HYDE, Lloyd	Portage la Prairie	PC
JOHNSTON, J. Frank	Sturgeon Creek	PC
KOSTYRA, Hon. Eugene	Seven Oaks	NDP
KOVNATS, Abe	Niakwa	PC
LECUYER, Hon. Gérard	Radisson	NDP
LYON, Q.C., Hon. Sterling	Charleswood	PC
MACKLING, Q.C., Hon. Al	St. James	NDP
MALINOWSKI, Donald M.	St. Johns	NDP
MANNESS, Clayton	Morris	PC
McKENZIE, J. Wally	Roblin-Russell	PC
MERCIER, Q.C., G.W.J. (Gerry)	St. Norbert	PC
NORDMAN, Rurik (Ric)	Assiniboia	PC
OLESON, Charlotte	Gladstone	PC
ORCHARD, Donald	Pembina	PC
PAWLEY, Q.C., Hon. Howard R.	Selkirk	NDP
PARASIUK, Hon. Wilson	Transcona	NDP
PENNER, Q.C., Hon. Roland	Fort Rouge	NDP
PHILLIPS, Myrna A.	Wolseley	NDP
PLOHMAN, Hon. John	Dauphin	NDP
RANSOM, A. Brian	Turtle Mountain	PC
SANTOS, Conrad	Burrows	NDP
SCHROEDER, Hon. Vic	Rossmere	NDP
SCOTT, Don	Inkster	NDP
SHERMAN, L.R. (Bud)	Fort Garry	PC
SMITH, Hon. Muriel	Osborne	NDP
STEEN, Warren	River Heights	PC
STORIE, Hon. Jerry T.	Flin Flon	NDP
URUSKI, Hon. Bill	Interlake	NDP
USKIW, Hon. Samuel	Lac du Bonnet	NDP
WALDING, Hon. D. James	St. Vital	NDP

LEGISLATIVE ASSEMBLY OF MANITOBA

THE STANDING COMMITTEE ON PUBLIC UTILITIES & NATURAL RESOURCES

Monday, 25 June, 1984

TIME — 8:00 p.m.

LOCATION — Winnipeg, Manitoba

CHAIRMAN — Mr. P. Eyler (River East)

ATTENDANCE — QUORUM - 6

Members of the Committee present:

Hon. Messrs. Cowan, Parasiuk and Schroeder

Messrs. Enns, Eyler, Fox, Harapiak and Malinowski

APPEARING: Mr. Murray Fraser, Executive Vice-President - Corporate Services

Mr. C. Goodwin, Executive Manager - Corporate Planning

Mr. A. Derry, Manager - Power Supply Planning

Mr. J. Arnason, President

Mr. M. Elieson, Deputy Minister - Department of Energy and Mines

MATTERS UNDER DISCUSSION:

Annual Report of Manitoba Energy Authority, Annual Report of Manitoba Hydro for fiscal year ended March 31, 1983

* * * *

MR. CHAIRMAN: I believe the Minister has an opening statement for this evening.

Mr. Parasiuk.

HON. W. PARASIUK: Mr. Chairman, last week when we discussed the power sale there were a number of questions raised that I think in part, or at least in one part I believe, will be answered in the presentation that Manitoba Hydro has. We indicated some of that last week.

I would propose that we have the presentation from Manitoba Hydro. If there are outstanding questions pertaining to the power sale, then they can be addressed and we could have them answered and then we could move on to other parts of the Hydro presentation that people may want to raise.

MR. CHAIRMAN: Mr. Filmon.

MR. G. FILMON: Mr. Chairman, as long as we're not closing the door to further discussions and questions of Mr. Eliesen in his capacity as Chairman of MEA and any others of the resource people that are here. I think it may facilitate it if we get the complete presentation from Hydro and then we can go back to questions.

HON. W. PARASIUK: That was our intention of that. I think we can proceed on that basis and the resources will be here to answer questions as they arise.

MR. CHAIRMAN: Mr. Arnason.

MR. J. ARNASON: Thank you, Mr. Chairman, and committee Members.

It is that time of year again when I, as President and Chief Executive Officer of Manitoba Hydro, have the opportunity to come before this committee to review the Corporation's activities. It is the objective of Management and Staff of Manitoba Hydro to provide an economic and reliable utility service to the people of Manitoba. The process of reviewing the corporation's activities will assist us in doing our job better.

I have with me a number of staff memebers who will assist with the presentation and help with the questions that may arise during this session. Murray Fraser, Executive Vice-President, Corporate Services, will provide information on the financial results as a part of my presentation. Chris Goodwin, Executive Manager, Corporate Planning, will provide an overview of acitivites related to the Northern Flood Agreement.

In addition, with us today is Don Duncan, Vice-President, Engineering and Construction; Will Tishinski, Vice-President, System Planning and Operations; Ralph Lambert, Vice-President, Customer Services; Verne Prior, Manager, Public Affairs; Bob Brennan, Group Manager, Financial Services; Art Derry, Manager, Power Supply Planning; and Paul Thompson of the Power Supply Planning Department.

We will do our best to respond to your questions when they are asked. If we do not have all the information with us we will provide it either at a later meeting of the committee or by way of a written response.

The purpose of the committee meeting, as I understand it, is the consideration of the 32nd Annual Report of Manitoba Hydro-Electric Board for the year ending March 31, 1983. As has been the custom, however, the committee will be provided with preliminary results from the fiscal year just ended on March 31, 1984.

Manitoba Hydro, being primarily a hydro-electric utility, relies heavily on water flows for generating the bulk of the customers' energy requirements. Consequently, the financial results of the utility's operations are substantially influenced by weather conditions. Fiscal year 1983-84 was a good year for Hydro generation, with water conditions being slightly above average. Average water conditions provide an opportunity to produce about 21 billion kilowatt hours of energy per year from the Hydro Electric plants. The fiscal year ended with total hydraulic generation of 21.9 billion kilowatt hours, exceeded the previous record of 21.6 billion kilowatt hours established in the fiscal year 1982-83.

The corporation's revenue was enhanced through the ability of the utility to sell to extra-provincial markets. Because water conditions were good, surplus energy sales to neighbouring utilities in Saskatchewan, Ontario, and the United States for the fiscal year just ended, totalled $105.7 million.

This is a record, slightly exceeding the previous fiscal year ending March 31, 1983, when total export revenue was $105.4 million. By comparison, the average annual extra-provincial revenue for the past five fiscal years, that is from March 31, 1980 to March 31, 1984, was $92.3 million. The major export market was the United States, which accounted for over 79 percent of the total exports of approximately 6.8 billion kilowatt hours for the fiscal year just ended.

Good water conditions resulted in over 99 percent of all energy for the integrated system having been generated from hydraulic sources. At the year-end the Nelson River Plants had contributed approximately 76 percent of the total hydraulic energy.

A new fiscal-year record was established when total integrated system, that is Manitoba Hydro and Winnipeg Hydro, generation and purchases amounted to 22.1 billion kilowatt hours, which was 1.2 percent higher than the previous record of 21.8 billion kilowatt hours set in the previous fiscal year.

The four Nelson River Plants, Kelsey, Kettle Rapids, Long Spruce and Jenpeg together established a new fiscal year record in 1983-84 with a total output of 16.6 billion kilowatt hours exceeding the 1982-83 record by 5.3 percent. Of the total energy generated, 63 percent was transmitted over the high voltage direct current transmission system.

Preliminary financial results for the fiscal year ending March 31, 1984, indicate an excess of expenses over revenue of about $3.7 million. This is the fourth consecutive year in which expenses exceeded revenues. I am extremely pleased to report that the $3.7 million excess of expenses over revenue is an improvement over the $23.1 million deficit forecasted in March, 1983, following approval of the 9.5 percent rate increase effective May 15, 1983. This excess of expenses over revenue will result in a change in reserve position from $82 million at March 31, 1983, to $78.3 million at March 31, 1984. Our forecast at December, 1983, had been for a $10 million deficit and a $72 million reserve position at March 31, 1984.

Energy generated to serve Manitoba customers was 14.4 billion kilowatt hours compared to 13.3 billion kilowatt hours the previous year, an increase of 8.5 percent. Electrical energy usage by the residential and farm sector was 4.2 billion kilowatt hours compared to last year which was 3.9 billion kilowatt hours.

Sales to power and general service customers increased to 6.1 billion kilowatt hours for the fiscal year just ended compared to 5.6 billion for fiscal year 1982-1983. The 30 largest customers, who represent about one-quarter of the Manitoba load, used 3.2 billion kilowatt hours which was 14.3 percent more than fiscal year 1982-83. As reported to the committee last year, the fiscal year 1982-83 sales to the 30 largest customers was 89 percent of the previous year 1981-82.

The system peak demand to supply Manitoba customers during the fiscal year 1983-84 was 2,889 megawatts which occurred on December 20, 1983 at 5:22 p.m. This was an increase of 13.6 percent over the 1982-83 fiscal year's peak and 5.6 percent higher than the previous recorded peak demand set during the fiscal year 1981-82, on January 15, 1982.

At last year's meeting of this committee, I reported that Manitoba Hydro had experienced the worst ice storm in its history during the month of March, 1983. The final cost of that ice storm was $2.8 million and final repairs resulting from it were not completed until last September. While there were no severe ice storms in the past fiscal year, the corporation experienced its worst ice storm in April, 1984, and I will be commenting on this matter at the conclusion of this presentation.

As a result of repeated experience with ice storms, an eight-mile section of overhead line was installed underground along the Pembina Escarpment between Manitou and Darlingford. Ths installation was done on a trial basis to assess the comparative costs of rural underground with overhead lines and to gain some experience with rural underground installations. For this one trial installation, which was under ideal weather conditions, it was determined that rural underground construction costs exceeded overhead construction costs by 60 percent. Consideration is being given to placing additional lines underground.

Further improvements were made during the year in techniques for melting ice accumulated on line conductors. Modifications, at a cost of approximately $300,000, were made to stations to facilitate the ready application of ice melting techniques. This will assist in reducing customer outages due to ice storms.

The total installed winter capacity of the integrated system, that is the Manitoba Hydro and Winnipeg Hydro system, is 4,091 megawatts. Based on an average forecasted annual load growth of 3.1 percent over the next 10 years, the next addition to the generating capacity to serve the Manitoba load will be Limestone, which is scheduled for in-service in 1992. With the announced 500 megawatt firm sale to Northern States Power, it will be necessary to advance the Limestone in-service date, in order to provide for a deficiency in capacity in the winter of 1993-94.

There are presently 19 diesel electrical installations serving isolated communities which are primarily located in the Northern part of the province. This is a reduction of one in the number of diesel installations in service over the last year. The community of Berens River on the east side of Lake Winnipeg was connected to the central system during March, 1984. This is the second of five communities being connected to central service on the east side of Lake Winnipeg. The other communities of Little Grand Rapids, Paungassi and Poplar River will be connected in 1989. The construction of the line also resulted in the connection of the communities of Loon Straits and Princess Harbour to central station service. They were not previously served by a Manitoba Hydro.

Manitoba Hydro will be constructing a transmission line from Gillam to Churchill to provide central station power to that community. The capital cost of the line is financed jointly by the Federal and Provincial Governments and by Manitoba Hydro. The scheduled in-service date for the line in 1987. Preliminary figures indicate that additions to fixed assets for the fiscal year ending March 31, 1984, will be $152.5 million. This compares with $129 million for the previous fiscal year.

Rehabilitation of the Seven Sisters and Great Falls Generating Stations continued. The work at Seven Sisters was completed in November, 1983, for a total estimated projected cost of $22 million. The Seven Sisters Dam was originally built in the early 1930s. The work at Great Falls is expected to be completed in September 1985, for a total cost of $46 million. This plant has been in service for some 61 years.

Capital expenditures in the fiscal year 1983-84 for expansion of the high voltage direct current transmission system at Dorsey and Henday amounted to approximately $60 million.

We forecast that $35 million will be spent in the next fiscal year to complete this work. This will improve the capacity, performance and reliability of the high voltage direct current transmission facilities, which is vital to the security of the system. About two-thirds of the energy generated on the system is transmitted over the HVDC facility.

As reported to the committee last year, a 230,000 volt transmission line between The Pas and Flin Flon was placed in service in April, 1983. This was done to provide a firm supply to the Flin Flon area and also to provide an avenue for transmitting power from Saskatchewan's Island Falls Generating Station through Manitoba to southern Saskatchewan. In the latter part of December, 1983, Manitoba Hydro was advised that Hudbay in Flin Flon was negotiating for the repurchase of the Island Falls Generating Station from the Saskatchewan Power Corporation.

If this purchase had been concluded, it would have resulted in a loss of load of some 90 megawatts to the Manitoba Hydro System. Saskatchewan Power Corporation had requested a purchase of 90 megawatts from Manitoba Hydro, in the event of the sale of the Island Falls Station to Hudbay. It is my understanding from recent reports, that the sale of Island Falls to Hudbay is no longer being considered.

Of the $152.5 million additions to fixed assets for the year, approximately $41.6 million was spent on work associated with extension of the transmission and distribution system to provide service directly to customers.

Activities associated with these expenditures have spread throughout the system and include items such as service extensions, minor additions to distribution, transmission and generating plants.

Planning for the Mandan transmission line between Manitoba and Nebraska continued during the year. The primary focus was with the selection of a preferred route from the five alternative routes which were developed within the corridor. An interim preferred route has been recommended to Provincial Government Regulatory Agencies and approved, subject to agreement on a border crossing.

Once the interim preferred route has been established, further public meetings will be held with affected communities, an environmental impact statement will be filed, followed by a recommendation of a preferred route for final provincial regulatory review and approval. The in-service date of 1989 is based on a contract being signed in 1984, which is unlikely in view of recent delays. Contractual discussions are continuing with the U.S. utilities.

The future role of the Selkirk Generating Station was reviewed. It will not be needed for several years for capacity purposes. In view of the availability of Hydro generation and the opportunity to import power over the interconnections, a decision was made to reduce the generating role of the plant. The generators at Selkirk have been converted to synchronous condenser operation to provide much needed voltage regulation to the system. This conversion does not limit our ability to use the plant for power generation, should the need arise.

During the fiscal year ending March 31, 1984, Manitoba Hydro purchased approximately $80 million worth of goods and services, of which 64 percent were placed with Manitoba companies.

The utility ranked the best of 14 major electrical utilities in Canada in safety for the combined normal electric utility and heavy construction operations. This is the 20th consecutive year in which Manitoba Hydro has ranked amongst the top three best utilities. Manitoba Hydro ranked second best amongst the 14 major Canadian utilities in vehicle safety. The above safety particulars are based on the calendar year statistics which are published by the Canadian Electrical Association.

Employment during the fiscal year just ended peaked at 3,778 in August of 1983, which compares with 3,859 for the previous fiscal year.

Over the past several years, there has been a gradual reduction in staff levels in response to decreased activity. This is due to the reduced rate of load growth in the past few years. There have been an approximate 25 percent reduction in staff since the mid-Seventies. For the most part, reductions have been accommodated through attrition resulting from retirements and voluntary departure of staff. Recently management found it necessary to issue termination notices to some employees in redundant positions. Included are management, professional and supervisory employees.

It has been the objective of management, during the past several months, to adjust the organizational structure and staffing levels to more closely reflect current and projected corporate needs. The organizational structure, which was established during the mid-Seventies, was no longer consistent with present requirements. Staff levels peaked in 1975 at approximately 5,000 employees, when a number of major Northern projects were being constructed concurrently.

In June, a reorganization of the Engineering and Construction Group was instituted. This was done to respond to current and projected capital construction programs. During the period when capital activity was high, there were essentially two Engineering and Construction Groups in the corporation. One was devoted to activities related to the addition of major generating facilities, and the other involved major transmission and station additions. Amalgamation, under present circumstances, will result in a more efficient Engineering and Construction Group for the corporation.

During the course of the year a senior management level has been removed to improve corporate effectiveness by shortening the chain of command.

The corporation completed the development of its first corporate strategic plan, which provides a framework for corporate direction for the future. The plan reaffirms previously established direction and provides new thrusts necessitated by the rapidly changing environment in which the corporation must function.

As part of the continuing effort to improve corporate effectiveness, an Operational Review Program was initiated. The purpose of this program is to review, on a cyclical basis, our operations and assess how efficiently, effectively and economically the organizational units are in achieving their mandate and goals.

In respect to negotiations with the various bargaining units within the corporation, the utility is in the second year of two-year agreements. Two-year agreements, signed approximately one year ago, provided for a wage re-opener only during the second year. A wage settlement has been reached with all three of the units for the second term of their respective contracts. For the union and non-union groups, the average annual increase in salary ranges from approximately 3.5 percent to 1.75 percent.

The continuing decrease in Manitoba Hydro's financial reserves, due to the fourth consecutive year in which expenses exceeded revenue, prompted management to recommend to the board a rate increase effective the beginning of the fiscal year, 1984-85. The results of the recommendation was approved for a 7.9 percent across-the-board rate increase effective April 1, 1984. Based on the financial forecast, it was expected that a reserve level of $72 million for the fiscal year 1984-85 could be maintained. Without the rate increase, it was projected that reserves would be reduced to approximately $46 million. However, the forecast did not consider the improvement, previously mentioned, reflected in the preliminary financial results. That is, preliminary financial results of 1983-84 indicate an excess of expenses over revenue of $3.7 million, compared to the forecast of expenses exceeding revenue by $10 million. Nor does the forecast include the financial impact on the 1984-85 fiscal year of the April, 1984 ice storm.

Murray Fraser, Mr. Chairman, will now make his presentation on the financial position of the corporation as part of my presentation.

MR. CHAIRMAN: Mr. Fraser.

MR. M. FRASER: Mr. Chairman, committee members, as indicated in the 32nd Annual Report, the fiscal year, 1982-83 ended with expenses exceeding revenues by $19.1 million. This was $2.7 million less favourable than the $16.4 million deficit on operations forecasted in December 1982. This difference was primarily because of the severe ice and wind storms experienced in February and March of 1983. As a result of the $19.1 million excess of expense over revenue, reserves of the corporation were reduced to $82 million. These results appear in the report before the committee.

As Mr. Arnason has mentioned, on a more current basis, preliminary results for the fiscal year 1983-84 indicate an excess of expense over revenue of approximately $3.7 million. This is a substantial improvement over the $23.1 million deficit forecast approximately one year ago. The reasons for this improvement are: increased sales to customers outside the province; increased revenues from sales to general consumers within the province; a general reduction in interest and escalation rates; and the effects of the restraint measures that have been in effect over the past year.

Because the preparation of the financial forecast is so important in the determination of requests for future rate increases, I would like to spend some time reviewing our current forecast and going over some of the assumptions that are used in the forecast preparation. I have had a few transparencies prepared to assist in this presentation. These are very similar to those presented by Mr. McKean a year ago and which appear in the report of the proceedings of the committee for 1983.

The first graph, which is entitled "Firm Energy Demand," indicates 20 years of actual growth in energy requirements of the Manitoba system and 20 years the forecasted growth. The historical portion is shown in red, the forecast is in blue, the vertical axis shows a percentage change, year over year.

The subject of load growth rate, whether it be historic or forecast, frequently provides grounds for a wide variety of opinion and perhaps this chart illustrates some of the reasons. At first glance, it would appear that the growth historically has been somewhat erratic and that we expect it will be considerably more orderly in the future. That is not the case. We expect, as the future unfolds, the load growth will continue to show erratic development just as it has in the past, but there is simply no way to predict the magnitude or the timing of the swings. Therefore much discussion and effort goes into attempting to select some kind of average rate of growth to provide an indication as to when the next source of generation and other major facilities will be required.

It is generally accepted that the growth rates of the late '60s and earlier '70s, as shown here, have moderated considerably and this has had a dramatic effect on Manitoba Hydro's plans for additional generation.

Limestone generating station, once thought to be required in the early'80s, is now scheduled for first power in 1992-93, based on the current load forecast which is again under review. That schedule is based on an assumption that the average annual increase in firm energy load growth will be 3.1 percent over the next 10 years and 2.8 percent over the next 20 years. This rate of growth indicates requirement for first power from Limestone in 1992 followed by Wuskwatim in 1999 and Conawapa some time after the year 2000.

This generation sequence does not include the effects of a Mandan inter-connection which is presently under discussion, nor does it include the effects of the recently announced sale to Northern States Power, nor does it provide for an aluminum smelter prior to 1992 or '93.

I think it's evident from the chart just how hard it would be to pick out any definitive trend from the years past. Would it lie here? Would it lie here or would it, as we've suggested, lie somewhere in here? And the past may not be particularly relevant. As it was stated a minute ago, the forecast is important as it is used to establish the required date and hence the commencement date of major expenditures.

The major generating station at a remote Northern location takes a long time to build. Hence there is time for conditions and forecasts to change significantly between the commencement date and the inservice date. The small change in the forecast rate can make a significant change and it is difficult for forecasters to remain objective in view of the pressures that may be exerted. In fact, in periods of high growth, forecasts tend to increase each year and in periods of low growth they tend to decrease. Changes in direction are virtually never forecast.

The values on this chart are fractionally lower than they were last year and I could give you a list of specific

numbers as Mr. McKean did, in response to a question later, if that's the committee's wish. There was one specific question from last week. Someone asked what happened to Mr. McKean's forecast of 5.8 for the year'83-84 and Mr. Arnason pointed out it turned out to be 13.6.

This chart indicates historical hydraulic generation of the integrated system together with projected hydraulic generation based on average water flows. The area shaded in blue indicates the firm energy requirements of the Manitoba system and the area shaded in red indicates the amount of energy that is surplus to Manitoba's requirements and therefore available for export under average flow conditions.

The design criteria of our hydraulic system requires that capacity be provided to supply energy for the Manitoba load during periods of lowest water flows, therefore surpluses will always be available for export during periods when river flows are above that lowest level. Therefore the chart shows an ability to sell energy extra-provincially, allowing for the effective management of hydraulic resources and avoids waste from water spillage that would otherwise occur. The chart shows the effects of droughts in '77-78 and again in'81-82. It also shows the increased ability when Long Spruce came on in here about 1979.

As you can see from the chart, the amount of energy available for export diminishes each year until Limestone comes into service in 1992-93, because of the increase in load requiredments for the Manitoba system.

(Note: Problem with projector)

HON. W. PARASIUK: Mr. Chairman, they've just gone down to see if they can get the guards to open up . . . I know that there's another overhead projector there. It shouldn't take more than a couple of minutes.

MR. M. FRASER: The third chart was entitled, A Potential Range of Net Interchange Revenue. For example, in the year'84-85, the difference between the maximum and minimum river flows is approximately $125 million. This difference becomes even more pronounced in years in which low river flows would cause us to be net importers of energy, such as in 1991-92, where the difference between maximum and minimum water flows is approximately 250 million.

This chart simply indicates the rates of interest and escalation used in the financial forecast. Interest assumptions are the same as last year. The escalation has been reduced by 1 percent. We are indicating that we will attempt to hold wages, salaries and other operating administrative expenses to a combined overall increase of 5 percent in'84-85 and'85-86, which is below the escalation that is assumed will apply to capital expenditures. For the years '86-87 and beyond, we have assumed that operating expenses will escalate at the same rate as capital expenditures.

This chart of total capital expenditures indicates 10 years of actual expenditures and 10 years of forecast expenditures. For comparative purposes, expenditures have been indicated in current dollars which were the red bars and will be the left-hand bar in each case on the printed diagram.

As you can see, capital expenditures will remain very low for the next several years and even with the commencement of construction on Limestone forecast expenditures expressed in terms of 83-84 dollars, do not reach the levels of the mid-1970s.

Now the next diagram compares revenues to expenses and again the diagram shows 10 years of history and 10 years into the future. We lose something by losing colour in this case. But perhaps if we could look at the right-hand side of the diagram, the lowest chart if you could see it in colour, is blue. It indicates a projected revenue without any future rate increases. The next line up is orange and is a projection of total expenses and the top line is a projection of total revenue with an assumption of certain future rate increases.

In the years 1974 to 1979 annual rate increases were implemented and you will note that the lines of total revenue and total expense matched very closely through that period.

In the fiscal years ended March'79 and'80, the total revenue comfortably exceeded total expenses whereas 1981 and 1982 were years of relatively poor water conditions which resulted in the total expenses exceeding total revenues. Total expenses have continued to exceed total revenues and the 7.9 percent rate increase implemented April 1, 1984, was intended to allow us to match revenues and expenses in 1984-85. You will note that at that point on the chart, two curves come together.

Looking into the future, that chart indicates that rate increases will be required if we are to continue to match expenses and revenues in the future. That's represented by the difference between the blue and the orange lines.

Now one approach obviously would be to return to the practice of the mid-'70s and attempt to match anticipated expenses with annual revenues. Assuming that we were successful we can see that relatively modest increases would be required up until the time that Limestone generating station comes into service. So what we're looking at now is the second line from the bottom, but if you look at the year 1993, there is a very marked upturn at that point.

Another point to remember is that with this scenario reserves would not be increased if we simply matched expenses and revenues. As alternative, we looked at a series of uniform rate increases that would allow us to match or exceed expenses.

What the green line shows is that an increase in the neighborhood of 7.9 percent in April of'85 would provide an addition to reserves of something in the neighborhood of $3 million. I think it's so close together on the printed chart that you can't see any spread.

Thereafter, annual increases of 6 percent, which is 1 percent below the assumed rate of escalation, on the previous chart were assumed. Those assumptions provide the green line which remains above the orange line out to the edge of the chart. We've also tried to look some years beyond the chart because all of Limestone would not have been absorbed as of March 31, 1994. Therefore, it was necessary to try and get a look beyond that in order to determine if the assumed increases would in fact, allow us to absorb Limestone without any disruption in the assumed uniform series of rate increases. That was the case.

Of course these assumptions have a very significant impact on corporate reserves. On that subject, an internal task force late in 1983, concluded the study which resulted in the following objectives.

First, that reserves should be increased to a minimum level that would withstand effects of two consecutive years of below normal river flows. That was estimated by the task force to be in the neighbourhood of $120 million. However, that sum would continue to be a moving target as we have seen from the earlier chart that the impact of poor water varies considerably from year to year.

In view of the chart that we have just looked at, the $120 million reserve would appear modest and will undoubtedly be reviewed. But regardless of the dollar value it provides a concept of reserves.

Another suggestion was that reserves should be further increased to provide for the internal generation of funds prior to the addition of new generation. Not only would this provide some flexibility in terms of debt financing, but it would also mitigate the large rate increases that would otherwise be required at the time of the addition of Limestone.

To achieve this objective, our current financial forecast projects a rate increase of 7.9 percent April 1, 1985, followed by annual rate increases of 6 percent on April 1st of each year thereafter.

The projections indicate these rate increases are sufficient to improve the present debt/equity ratio of 97:3 to 82:18 at the end of 10 years and to maintain a debt/equity ratio of approximately 80:20 through the completion of Limestone and probably during the construction of Wuskwatim and Conawapa Generating Stations as well.

The next graph compares Manitoba Hydro's actual and projected rate increases with the actual and projected rates of inflation. The purpose of the graph is to indicate that rate increases have been well below the rates of inflation since the inception of the rate freeze in 1979. The next graph is very similar except that it commences just one year prior to the removal of the rate freeze and indicates that in the short term, increases would be very close to rates of inflation but below rates of inflation in the longer term.

There should be two or three additional charts comparing monthly bills of Manitoba Hydro customers to ratepayers in other provinces. The first indicates a bill comparison of a residential customer using 750 kilowatt hours in a month. It shows that we are at the low end of the chart and we were in the same position last year. The spread with No. 2 has opened up a little bit in the past year.

The next chart is the same class of customer but this would be typically an electric heat customer, rather large user, we're at the low end again. We were low last year. The spread here is significantly greater than it was for the smaller customer and it is about the same as it was a year ago.

The next chart is a general service rate and we didn't have this last year. The first one is again a low usage customer - 750 kilowatt hours in a month and here we are not low.

The following chart is the same class of customer but again a relatively high usage customer, one using 10,000 kilowatt hours in a month. Here we are low by quite a significant margin. This chart was not presented last year.

Finally as the comparison of residential bills across the province, we have four rate zones based on customer density and is similar to last year and the differential is all in the service charge and initial block rate shown by the lower figure in each bar. For example, the Winnipeg rate of $28.97 should be $2.65 difference between that rate and the rate charged in Dauphin, Brandon, Flin Flon, Portage, Selkirk and Thompson. If you look at the total charge, $155 as opposed to $158.61, the difference is still $2.65. That is because the energy rate is uniform throughout the province and it's only the initial block and the service charges that vary.

Thank you, Mr. Chairman. That's the end of this presentation.

MR. CHAIRMAN: Mr. Arnason.

MR. J. ARNASON: I indicated earlier, Mr. Chairman, that Mr. Goodwin did have some information on the Northern Flood Agreement. We will pass that information out. Is it your wish and desire to have him cover this in detail or did you want to speed things up?

HON. W. PARASIUK: Mr. Chairman, I'm wondering if we could have this presentation included in Hansard so that it would be part of the record of the Public Utilities presentation. That is to be, I think, included in Hansard for record purposes, that is, a further piece on the Northern Flood Committee. If members of the committee have questions on it, they could raise that today or tomorrow. That would likely save a bit of time or else we could have the presentation . . .

MR. CHAIRMAN: Does the member have leave to have a written document included in Hansard? (Agreed).

Mr. Arnason.

BRIEF PRESENTED BY CHRIS GOODWIN BUT NOT READ:

PRESENTATION TO THE STANDING COMMITTEE ON PUBLIC UTILITIES AND NATURAL RESOURCES NORTHERN FLOOD AGREEMENT

The Northern Flood Agreement is between the Government of Manitoba, Manitoba Hydro, the Northern Flood Committee incorporated by the Indian Bands of Nelson House, Norway House, Cross Lake, Split Lake and York Factory and the Government of Canada.

The principal thread of the Agreement is that Manitoba Hydro has developed the Lake Winnipeg Regulation and Churchill River Diversion Projects; these projects have modified the water regime; modification of the water regime has some adverse effects on the residents on the Reserves; the adverse effects of the projects must be compensated for fairly and equitably; and because the adverse effects were not completely known at the time the Agreement was written, there was a need for an Arbitrator to fashion just and appropriate remedies as necessary.

Compensation under the NFA is available to individuals who are members of one of the five Bands and to groups such as trappers associations where the membership is substantially comprised of individual Band members. The principal part of the Agreement

as it affects Manitoba Hydro is to ensure the right of these persons and groups to compensation from Manitoba Hydro. To May 17, 1984 Manitoba Hydro has settled 1056 claims generally with individuals, 139 claims of many different types have been submitted to the Arbitrator, and a number of settlements for compensation are under negotiation at present, these are principally for fishing and trapping losses. Of the individual claims, 29 are still in process and 21 were rejected, the remainder were settled or dropped. The total amount paid out was $672,000 to December 31, 1983. Of the arbitration claims, only five have been argued before the Arbitrator, 15 have been agreed on and a large number are being actively negotiated. Although at March 31, 1984 there were 48 arbitration claims filed, April 15 was the deadline by which the right to claim for matters arising more than four years ago expired. 91 claims were submitted immediately prior to the deadline.

Of these 91 claims, 46 were for individual compensation matters, such as damage to an outboard motor. In order to minimize legal costs associated with these 46 claims, they are being dealt with in a package arrangement through negotiation. Only if negotiation cannot be completed, will each one be brought before the Arbitrator in a formal manner. The remaining 45 claims are very varied in nature, ranging from specifics such as damage to a particular commercial fishery, to generalized claims such as not developing the hydro potential on the Burntwood River leading to a loss of potential jobs, and several claims are duplicates—for instance, a previous claim by the Northern Flood Committee was for the provision of a bridge on the Reserve at Cross Lake and a duplicate claim has been received from Canada against Manitoba and Manitoba Hydro for this same bridge.

It is evident that the Office of the Arbitrator is being used to a greater extent than might have been expected when the Agreement was signed. In some respects the filing of a claim with the Arbitrator is a matter of record prior to negotiations being undertaken by the parties. It has been our experience that a large number of claims can be negotiated and are likely to reach successful conclusion without hearings before the Arbitrator. Such hearings are very expensive for the various parties and every effort is made to avoid them.

The first Arbitrator appointed under the Northern Flood Agreement—His Honour Judge Patrick Ferg—served from 1980 to 1984, and has resigned. During the interim period when a replacement Arbitrator is being selected, Judge Ferg has agreed to endorse any Order which is agreed between all parties and does not require hearings to take place. This allows the parties to formally conclude negotiations through an Order of the Arbitrator. The parties are meeting to select a successor Arbitrator and many names have been put forward and discussed by our representatives. In order to reduce the pressure on the Arbitrator and to reduce the cost of arbitration activities, parallel discussions are taking place on the appointment of a Mediator to assist with negotiations without the formality and expense of arbitration hearings. No decision has yet been reached on this appointment.

The other principal articles in the Agreement as far as Manitoba Hydro is concerned deal with the minimization of damage, the mitigation of the effects of damage, the implementation of the applicable recommendations of the Lake Winnipeg, Churchill and Nelson Rivers Study Board, and the provision of information on the operation and future planning of our projects.

The Agreement was initiated when the Northern Flood Committee was originally formed at Nelson House in 1974. It was evident that the Churchill River Diversion would lead to flooding of Indian Reserve land which Manitoba Hydro could not expropriate. This need for an Agreement extended to the Government of Canada and the Government of Manitoba as well as to Manitoba Hydro, and the Agreement covers the provision by Manitoba of additional land in exchange for the land affected by the Manitoba Hydro projects in the amount of four acres for each acre affected. Additional clauses in the Agreement affecting government rather than Hydro deal with employment, training, economic development, the provision of services, enhancement of resource harvesting, etc. With regard to employment and training, the Manitoba Hydro projects have provided some opportunities and a major construction project in the future would, of course, provide more opportunities for the residents of these reserves.

It is Manitoba Hydro policy to negotiate compensation packages for fishing or trapping damage which represent long-term compensation for the damage or loss. An example is the settlement reached this year with the fishermen at South Indian Lake where we understand the settlement package of $2.5 million has enabled the fishermen to develop alternative fisheries to make up for losses suffered on Southern Indian Lake itself.

Where the Northern Flood Agreement has allowed Hydro to take land along the border of affected waterways, Manitoba Hydro has arranged for moving of buildings, or the provision of new ones. Where the Indian Band has preferred, Manitoba Hydro has attempted to provide buildings from construction sites which are surplus to the Corporation's requirements as part of the settlement and this has enabled the Bands to acquire additional housing at favourable costs.

Raising the water levels at Nelson House would have endangered the clay banks of the lake in the vicinity of the community if they were not protected. This has generated work on the reserve for the protection of these banks and this has been undertaken by a subsidiary company of the Band, which has quarried, transported, and placed appropriate rock fill. In this way Manitoba Hydro has been able to assist in the development of a small viable construction company on the Reserve.

One of the major compensation works has been the Cross Lake Arena. The Arena has been completed, it was being used approximately 16 hours each day, all week up to early June and appears to be providing a welcome facility for hockey players and skaters in the community and the focal point for involved families. Summer programs are now going into effect.

The arena concept and other related requirements such as training, use of local labour, materials, etc. were planned with input from all concerned parties, over an extended period through 1982 and into early 1983. The arena was designed and constructed through 1983. In late December of 1983 the partially completed arena was turned over to the designated operating

group of the Cross Lake community for limited use during the Christmas/New Years' holiday season. Except for a few minor deficiencies, the arena was completed and turned over to the community in late February 1984 for their full time use.

When the arena design was developed to meet the requirements of the Interim Arbitration Order, the Northern Flood Agreement and all other requirements to put in place a complete, low maintenance facility, the total estimate was set at $3.5 million. The final total expenditure of this facility is expected to be $3.797 million, or 7 percent over budget.

Contracts were awarded to the community construction company which included:

Clearing? 2,500
Site Improvements? $171,700
Supply of Concrete Aggregate 38,200
Garbage Removal and Fill? 83,700
Supply of Concrete? $174,400
For a total of? $470,500

In addition to getting a first class arena, the community of Cross Lake also acquired substantial training and employment benefits as a result of the project. The training program had included 18 trainees, and the hiring of 13 qualified locals. In total 1,116 person-days of training were provided.

A project which was discussed at last year's meeting of the Committee was the bridge at Cross Lake which provides access to the island on which many members of the Band reside. This bridge is partially complete and in operation, dispensing with the need for a ferry and for ice bridges in winter. The bridge is being constructed by the Federal Government. The portion of cost which is attributable to the affect of the Manitoba Hydro project is being negotiated with the Federal Government.

In the past fiscal year Manitoba Hydro's expenses relating to mitigation in total, including Northern Flood Agreement related matters, was $700,000 charged to ongoing operations, and $8 million which was capitalized because it pertains to future operations. The latter includes $2.5 million for the fishing compensation agreement at Southern Indian Lake and $2.2 million spent during the year on the Cross Lake Arena.

MR. CHAIRMAN: Mr. Arnason.

MR. J. ARNASON: I mentioned earlier too, Mr. Chairman, that I had an addendum to my presentation related to the April 1984 ice storm. Once again, we can pass that information out or I can cover it in detail. Whichever is your desire.

MR. CHAIRMAN: What is the will of the committee?

A MEMBER: The same procedure.

MR. CHAIRMAN: The same procedure? (Agreed).
Mr. Arnason.

MR. J. ARNASON: Mr. Chairman, in concluding my presentation I would like to take this opportunity to thank all the employees of Manitoba Hydro for their record of dedicated service to the people of Manitoba.

That concludes my formal presentation.

MR. CHAIRMAN: Is there any questions from the committee? What is the will of the committee on how to proceed?
Mr. Filmon.

MR. G. FILMON: Mr. Chairman, as time went by there was a number of questions that arose, both from Mr. Arnason's presentation and Mr. Goodwin's presentation. Perhaps we can go through it and ask them the questions that arise from his presentation and then go on to some general questioning and discussion?

MR. CHAIRMAN: Proceed.

MR. G. FILMON: Turning to Page four of Arnason's report, where he gives the indications of the extra-provincial sales of energy.
What is the projection for the sales of energy between 1990 and 1995? Are those projections available?

MR. CHAIRMAN: Mr. Arnason.

MR. J. ARNASON: We have the projections from the financial statements relative to the revenue itself. We mentioned the 105.7 million extra-provincial revenue in the fiscal year just completed. Our projections for the next five fiscal years would be 93.3 million, and that's to the end of the fiscal year 1985; 85.4 million for 1986; 88.1 million for 1987; 84.6 million for 1988.

MR. G. FILMON: Are there figures beyond that?

MR. J. ARNASON: These projections that I'm reading from, Mr. Chairman, go for 20 years. They are based on Limestone 1992 without the NSP Sale.

MR. G. FILMON: Interruptible energy sales?

MR. J. ARNASON: Yes, these are basically interruptible energy sales.

MR. G. FILMON: I wonder then, if it's not too much trouble, if Mr. Arnason could keep reading them as far as he has them?

MR. J. ARNASON: 1988, I'm not sure whether I gave you that . . .

MR. G. FILMON: 84.6.

MR. J. ARNASON: . . . 84.6. Fine; 1989 - 81.8; 1990 - 72.2; '91 - 63.4; '92 - 68.2; '93 - 93.8; '94 - 155.3; '95 - 201.2; '96 - 203.1; '97 - 204.5; '98 - 201.3; '99 - 196.5; The year 2000 - 198.5; 2001 - 253.5; 2002 - 280.7; and 2003 - 392.9.

MR. G. FILMON: Does that assume that Limestone comes on fully in '94 and Wuskwatim in 2001 and Conawapa in 2003? Is that how it works?

MR. J. ARNASON: The in service dates, based on Manitoba load growth without the NSP Sale; Limestone 1992, Wuskwatim 1999 and Conawapa 2002.

MR. G. FILMON: Assuming average water flows, for instance, in the chart that Mr. Fraser showed, there is a great variation between the assumptions of low water, average water and minimum average and maximum. Is this assuming average flows for all these cases that result in these numbers?

MR. J. ARNASON: It's for average water conditions.

MR. G. FILMON: And that's in Canadian dollars?

MR. J. ARNASON: Canadian dollars.

MR. G. FILMON: Mr. Chairman, I note that the system peak demand in 1983-84 occurred on December 20, 1983. Is it normal for the system peak demand to come in December, or is it normal that it comes in, say, January or February?

MR. J. ARNASON: It has occurred both in December and January. Precisely, I don't remember how many times it's occurred in the last 10 years in either one of those two months, but you can bank on it being in either December or January of the year. I don't ever recall it being in February or November.

MR. G. FILMON: What portion of the peak demand might be represented in the latter part of December by Christmas lighting?

MR. J. ARNASON: I would think it would be a very very small portion of that peak demand would be Christmas lighting, very small. I wouldn't be able to give you a percentage, but relatively insignificant.

MR. G. FILMON: On Page 9, in the discussion of the comparative costs of rural underground installation versus overhead lines, indication is that insulation costs are 60 percent greater for underground. Are there any indications of what the savings are in terms of the lesser operating costs and lesser damage? We've seen indications in each of the past two years of massive damage costs due to ice storms and so on. What is the additional operating costs for having them overhead versus underground?

MR. J. ARNASON: That's an interesting question because this particular piece of underground in the ice storm in March of 1983, we had to roll this line five times during one ice storm. Now we've got it underground, so in that particular situation the maintenance costs will be substantially less. We haven't had a great deal of experience with underground and rural Manitoba. We're bound to get a few dig-ins and that type of thing, but I really can't give you a precise number. I would expect that there'll be substantially less. We hope to get more underground in this ice prone area and we're looking at that at the moment.

MR. G. FILMON: Turning to Page 10, where we are in discussion of the projected annual load growth of 3.1 percent, which would normally require Limestone to be in service by 1992, and the Northern States Power Agreement causing an advance in that date, we're assuming still that the construction time frame for Limestone, is it six full years?

MR. J. ARNASON: From the time we get the go-ahead until the first unit is on stream is six full years.

MR. G. FILMON: I recall that in the past it was considered to be between five and six years, and I thought that six full years was for full service. How long does it take to get full service from Limestone, that is, all 10 units?

MR. J. ARNASON: A normal construction schedule would be two units in the first year, five units in the second and three units in the third year for a 10-unit plant.

MR. G. FILMON: That means that to get the plant fully operational to full capacity is then eight full years?

MR. J. ARNASON: It will take us eight full years to get all units in service for the Limestone intallation.

MR. G. FILMON: The utility did projections as to when Limestone would ordinarily be required assuming a 2 percent annual load growth?

MR. J. ARNASON: Sir, with a 2 percent load growth, it would be four years later.

MR. G. FILMON: What would be the cost of accelerating Limestone by five years rather than the one year that occurs under the assumption of 3.1 percent load growth?

MR. J. ARNASON: I'm not sure if I understand the question, do you mind repeating it, please?

MR. G. FILMON: Mr. Chairman, there were some overhead slides given at the last meeting in which there was an assumed cost for the acceleration of Limestone - and I'm totally operating from memory now because I don't think that they appear in the Hansard - but they had indicated, I think, that there was $200-and-some-odd million value for accelerating the construction of Limestone by one year. Is it right then to assume that if you're accelerating it by five years, that it would be five times that amount?

MR. J. ARNASON: Mr. Chairman, the $206 million that you saw on the screen at the last meeting was the advancement in 1984 dollars for a sequence of generation that included Limestone, Wuskwatim and Conawapa during the sale period. If that is the number you're referring to, it didn't just cover Limestone, it covered a sequence of generation.

MR. G. FILMON: Mr. Chairman, I recognize that maybe I'm being unfair in asking these questions of Mr. Arnason and if the Chairman or the Minister prefers, I could certainly have those questions asked of Mr. Derry or Mr. Thompson who, as I understand it, are the system load planning people who made those projections. I guess the basic thrust of my question is, what would the figures demonstrate in terms of the value that you'd have to attribute to the acceleration of Limestone for the NSP sale if indeed you were accelerating it by five years rather than by only one year?

MR. J. ARNASON: I haven't got the answer to that question, but if staff have information relative to that, maybe they would like to make the presentation.

Mr. Chairman, this might be an appropriate time. There are a number of outstanding questions relative to the areas of sensitivity and load growths. Mr. Derry has information that he'd like to bring to this committee as a follow-up of the last meeting and this might be an appropriate time to get into that.

MR. G. FILMON: Mr. Chairman, before we get into that I'll just go through a few more things out of the President's presentation and then we'll come back to some of these details on specifically the Limestone and the Northern States Power Agreement. I'll just proceed very quickly to see if there are any others here.

Mr. Chairman, there's a reference in the report to the planning for the Mandan transmission line continuing during the year and that the primary focus was in selection of a preferred route. I'm wondering whether much of this information is not for public dissemination in view of the sensitivity of selecting routes, or is this all being done in the public eye and, if so, has a route been selected and what is the next step then.

MR. J. ARNASON: Mr. Chairman, there has been a great deal of input from the public and the municipalities involved and farming community in the selection process. We brought forward a preferred route to the regulatory agencies and that was approved last January, early in the year, as an interim preferred route, because we did not have a fixed crossing point at that time, although there is a Letter of Understanding between Manitoba Hydro and the regulatory agencies and Nebraska Public Power that the border crossing would be resolved; so it's an interim preferred route until the crossing is resolved. I might add that the negotiations with Nebraska and their affiliates are at a very critical stage and it would be inappropriate at this time to talk about any aspects of contractual matters relating to the Mandan line.

MR. G. FILMON: Mr. Chairman, on Page 17 of Mr. Arnason's report there's a reference to the employment levels at Manitoba Hydro, 3,378 in August of 1983, which continues a downward trend in terms of total employment. The reasons being given are decreased activity, which I assume is decreased construction and engineering activity primarily, and it refers to the reduced rate of load growth in the past few years, and in fact, from again, the recollection in the charts at the back of Mr. Fraser's presentation, it would appear as though the - in fact, I think I worked it out - that the average of, say, the five-year period of 1977-81 inclusive was less than 2 percent load growth and, as I indicated at the last committee meeting, the composite load growth projections of all of the electrical utilities in United States for this period of time is now at 1.5 percent per year. I'm wondering why the utility is not expecting that sort of reduction to continue and why they're projecting it at 3.1 percent over the next substantial period of time and then 2.8 percent thereafter.

It would appear to me that a figure - and I recognize the difficulties of projecting these things, but we're in an era in which conservation and reduction in consumption is being preached everywhere in North America and yet we're projecting higher growth rates than certainly our American neighbours and the President's own report refers to a reduced rate of load growth in the past few years. I'm wondering why the utility, in terms of domestic load growth, is not projecting lower rates of growth.

HON. W. PARASIUK: Mr. Chairman, Mr. Filmon raised these points last meeting and then talked about a cover story in the Business Week, May 21, 1984, and I had indicated that there were some other analyses going on and I think it might be an appropriate time to provide him with that. I'm refer him to - and I've got the copies here to send over to him - referring him to the following.

One of these is a report in the Globe and Mail, June 14, 1983, where a study done by the United States Department of Energy, Office of Policy Planning and Analysis, which is called, The Future of Electric Power in America, Economic Supply for Economic Growth, and I can make a copy of that up and send it over to him. The report on it indicates that reliable electric service will be jeopardized in much of the United States by 1990 if new generating capacity is not brought on line. This is the study of the American Federal Department of Energy and it says that a medium demand growth rate for electricity in the United States - and they're using a projection of 3 percent as their medium demand growth rate and they have a whole set of different scenarios in this - indicates a need for an additional 430 gigawatts of new generating capacity by the year 2000.

It shows very very major increases and then there's the June 20th edition of the Wall Street Journal, which indicates that electrical output rose by 8.3 percent in one year spurred by the economy and the bad weather, but it said that this had been the highest growth since 1973, so it may mean that the projections in the United States are much higher than the Business Week article that Mr. Filmon alluded to.

The final piece that I provide to him, and this may be coloring some of his thinking with respect to load-growth projections, and that's taken out of the Edmonton Journal, February 11, 1984, which indicates that the load growth in Alberta has dropped very significantly and that a couple of coal fire plants there aren't required and there's a big debate taking place as to whether they should be built or not - this is the Geneses and Shearness Plants (phonetic) near Edmonton - saying that those should be delayed because the low-load growth there.

At the same time, I think that the evidence would indicate that in the United States, at least, the load growth seems to be picking up. It certainly picked up in a very dramatic way last year. The study done by the U.S. Department of Energy, I believe in concert with the utilities, indicates that there could be very major shortages in the 1990s.

I would just like to provide that for Mr. Filmon because I indicated to him at the last meeting that I would provide that information which showed some contrary analysis and opinions on the part of people doing research with respect to the load-growth projections in North America.

MR. G. FILMON: Mr. Chairman, I appreciate the Minister's provision of that information.

I'll certainly review it with interest, but I point out to him, and it is part of the background from my questioning, it had nothing to do with the Alberta experience, because I hadn't seen that article, but in two of the past four years, for instance, Manitoba Hydro's own system had a negative growth rate, -2.1 in 1981 and -2.0 in 1983.

There was a sharp increase in'82 that represented Hudson Bay Mining and Smelting coming back onto the Manitoba system off the Highland Falls plant. This year, which seems to coincide with the experience that he quoted from the American article of an increase of about 8 percent, but that being evident of some of the recovery in the mining sector and so on.

It appears though if you take the long haul, excluding as I say the anomaly of Island Falls going back to the Saskatchewan system and Hudson Bay having to come into the Manitoba system, that basically from 1977 right through you only had one year in which we exceeded that 3 percent growth rate that the Hydro people are projecting. This year would be the second year out of that whole period of about seven years I guess.

I'm just questioning whether or not the utility is doing some sensitivity analyses that show what would be required if you assumed a 2 percent load-growth rate rather than a three. They had indicated that it then pushes back the need for Limestone by four years.

It seems to me we have to look at these possibilities when we're making decisions that involve commitments of hundreds of millions of dollars of additional expense on our part. They have to indeed to be taken into account when we arrive at a basis for pricing a sale such as NSP.

MR. J. ARNASON: Mr. Chairman, relative to that question, one of the problems we have in coming to this committee is that our load forecasts normally are reviewed in the month of June, so some of the figures that you've been receiving are based on so-called last year's forecast. We have a new forecast that is about 10 days old, it's hot off the press, and the numbers are 2.8 percent for the next 10 years and 2.5 percent for the next 20 years.

We were going to show some projections, some graphs for you tonight or at the next meeting to clarify that point. I believe I did mention at the last meeting the 3.1 figure was our current projection.

MR. G. FILMON: Mr. Chairman, if I can clarify, is Mr. Arnason then telling me that the date of 1992 is based on a 2.8 percent increase followed by a 2.5 percent increase for the following period of time, not the 3.1 that he gave me at the last meeting? Is that right?

MR. J. ARNASON: If that projector is working, we'll show a couple of charts there that might help clarify the point and the question being raised.

MR. CHAIRMAN: Mr. Goodwin.

MR. C. GOODWIN: Mr. Chairman, this is a comparison of the forecast on which our financial plans are based, which Mr. Fraser reviewed earlier and also showing the higher load growth experience of the past year and the projected forecast which is dated June, 1984.

The line on the left, which is higher, is the current forecast starting from a higher base and running at a lower rate of growth, 2.8 instead of 3.1. That becomes the lower forecast after approximately 1993. That is quite an expanded scale and the difference between the two forecasts we don't consider to be of any importance.

MR. G. FILMON: Mr. Chairman, Page 19 refers to a major or what I would interpret to be a major reorganization of the engineering and construction group having been instituted this year. It refers to the fact that capital activity had been high and there were essentially two engineering and construction groups devoted to major generation facilities and major transmission and station additions and so on. The whole net result of the amalgamation now being a reduction in staff and a more efficient engineering and construction group for the corporation.

My question to Mr. Arnason is why this wasn't carried out much earlier?

MR. J. ARNASON: I think that question would probably best be answered by those who are in charge as president sometime back. It is obvious to me that when I took over the job as president that I was going to match the human resources with the workload as I perceived it. We reviewed, not only the construction engineering areas, but many other areas of the corporation.

At least we've taken a step here and as a result of the reorganization, a reduction of some 5 percent in total staff within that group.

Now with what we see on our platter in the near future, no doubt this will change radically. Once again, we'll be matching our human resources with the workload and I perceive the work load to be increasing in the near future.

MR. G. FILMON: Mr. Chairman, it seems to me that was a topic of discussion at the committee meetings on Hydro last year and at that time I didn't detect there was a commitment to undertake this sort of thing. Obviously we're pleased that it has been undertaken. Mr. Arnason has further referred to the development of a corporate strategic plan providing a framework for corporate direction. I'm wondering if that plan is a public document or something that can be shared with members of the committee.

MR. J. ARNASON: It's an internal document, Mr. Chairman.

MR. G. FILMON: Just one further question, Mr. Chairman. I have an excerpt from a magazine called - it's the June 1984 issue of Plant Management and Engineering. The article is by Dennis Pybus, Manager, Electric Power Control Products, Asko Electric Limited, Brantford, Ontario. It has a box in which it states: "An annual survey by National Utility Service Canada Limited shows that Canada had the highest percentage increase of 12 nations in the cost of electricity to a typical commercial user. The survey compares power costs in U.S. cents per kilowatt hour. The average increase for Canada over 1983 is 10.1 percent compared to 1.5

percent for West Germany, 5.8 percent for the USA." This is the important part. "Manitoba has the highest increase 18.2 percent. The lowest is British Columbia with 2.2 percent." And then it gives the price increases for all the other provinces and their utilities. Just in summary, "the average increase for Canada is 10.1 percent." It's stated here that Manitoba had the highest increase in 1983 of 18.2 percent for the cost of electricity to a typical commercial user.

Now I wonder if the president or members of the staff could indicate if this is in error because it's my understanding that the increase of Hydro rates was 9 percent, or was there a greater increase for commercial users than for residential users, or how would we have arrived at that sort of increase?

MR. M. FRASER: The date that he picked for the article picked up two increases. We had a 9.5 percent increase on May 15, 1983, and 7.9 percent on April 1, 1984. I think if you compound those you'll come somewhere close to his number.

MR. J. ARNASON: I'm glad that question was asked because the firm that made that survey made quite an error and the calculations were made in New York. They calculated in U.S. dollars so the survey was inaccurate to the degree that the Canadian electrical association had to send out a letter to all the utilities making reference to the survey.

The other point I want to make is, these surveys can tell you any story depending on the time frame. If you took the time frame from February, 1979 to May 14, 1983, we would have had on average a zero rate increase.

MR. G. FILMON: Mr. Chairman, I hesitate to tell Mr. Arnason that we're aware of that. But he's making my point for me so I'll let him do it.

I think Mr. Enns has a few questions.

MR. CHAIRMAN: Mr. Enns.

MR. H. ENNS: Just a few more with respect to the present report. On Page 4, reference is made to the $105.7 million of sales of surplus energy. Further down the page, it's more specific, indicates that 79 percent of that was in fact to the American market. I wonder if Hydro can indicate to us how much of that 79 percent, either in percentage or in dollars, was to Northern States Power.

MR. J. ARNASON: The total sales in the last fiscal year to U.S. utilities was $84 million Canadian and the Northern States Power took over 52 million of that in Canadian dollars.

MR. H. ENNS: $52 million, Mr. Chairman, through you to Mr. Arnason, went to Northern States Power?

MR. J. ARNASON: $52 million to Northern States Power.

MR. H. ENNS: Mr. Chairman, through you to Mr. Arnason, we've talked about the possible sequences of construction with respect to future generating capacity, but we have not talked at all about the need for future transmission line facilities. I understood from our meeting the other evening that we generally agreed that current line capacity would facilitate Limestone. When would our next requirements for additional transmission lines follow then, with Wuskwatim? Certainly with Conawapa?

MR. J. ARNASON: I'll start the answer to that question and somebody else might want to add to it. The next requirement for transmission from the Nelson River would be related to the development of Conawapa, that would be the third Bi-pole. We have shown in our capital program Bi-pole Three being in the very late 1990s relative to Wuskwatim. We'd probably bring a line in of course from the plant at Wuskwatim into the grid system, probably in the Thompson area and probably some reinforcement of the transmission from Thompson into the southern system.

MR. H. ENNS: Just for general information, Mr. Chairman, through you to Mr. Arnason, what kind of dollars are we looking at in a major transmission line required for Conawapa, for instance?

MR. J. ARNASON: The numbers I have in front of me, Mr. Chairman, indicate Bi-pole Three, at 1.86 billion. That covers the transmission line and the equipment at each end, that is the inversion and conversion equipment at each end, and that's in 1997. That covers the first stage of Bi-pole Three.

MR. H. ENNS: Mr. Chairman, our D.C. line that was built, was done so, I understand, with the assistance of the Government of Canada, under what we would consider being pretty reasonable rates - interest rates of 5.6 percent. Has Manitoba Hydro received any indication or would it be their intention to - well in the first instance, any indication that the Government of Canada would be interested in helping us finance that $1.8 billion cost for the third Bi-pole line?

MR. J. ARNASON: That plant, Mr. Chairman, hasn't been pursued to my knowledge, but there's no reason why we can't ask the question.

MR. H. ENNS: While you're asking the question, you might ask for those interest rates of 5 percent that were available at that time.

Mr. Chairman, one further question to Mr. Fraser, in his comments with respect to rates increases. We have, of course, experienced a 9.5 percent rate increase in 1983, a 7.4 percent in 1984. He indicates that a further 7.9 percent increase would be required in 1985, then to be followed by annual rate increases of 6 percent. Now I take it that these are the projections that Mr. Fraser is presenting the committee with, without NSP or Alcoa or any other potential projects of that scale that are indeed based on the sequence of bringing Limestone, the next generating facility, on the line based on our domestic load growth requirements. You would see that happening in 1992-93, is that correct, Mr. Fraser?

MR. M. FRASER: Yes, that's correct.

MR. H. ENNS: Mr. Fraser, I suppose this is a question that worries many Manitobans. If, of course, on the assumptions that are being assumed will occur, is it your suggestion to the committee that NSP agreement can be fulfilled without changing this projection of rate increases?

MR. M. FRASER: Yes, that's basically correct.

MR. H. ENNS: Conversely, of course, if interest rates are not those that have been taken into the equation, or indeed if our cost estimates for which we have not built any provision for sharing with the agreement, the responsibility lies totally within Manitoba Hydro - what I'm getting at - the forecast of a 7.9 percent increase in 1985 followed by 6 percent increases, is based on the fact that the current data that has been put before this committee with respect to NSP applies?

MR. M. FRASER: If I understood the question, the answer is yes, but I'm not really sure I followed you all the way through that.

MR. H. ENNS: Well let me put it more simply. If interest rates should rise to 14 percent during the cost of this thing would that considerably change the increase in rates that you would be asking this committee or some future Public Utilities committee or government to approve, to still maintain the balance of the curve, the graph that you showed us here?

MR. M. FRASER: Absolutely. I think I should make clear that the 7.9, the 6 percent was just a one case study, if you like. It was an attempt to see what could be done, doing something relatively uniform, rather than the rather dramatic increases that would be required if we simply matched revenues over a period of some time. So it was really an attempt to do that.

What point we're really trying to make there is the rate of escalation was assumed to be 7 percent. Clearly, if that's higher, then the costs would have to go up higher. What we're trying to demonstrate is that it should be possible to run a series, because you see, in there was an assumption that there would be a series of years of escalation at 7 percent. So we're saying if that comes about, we would track that at a series of rate increases 1 percent lower, at 6 percent, and be okay. Now if the 7 percent turns out to be wrong, then the other answer is wrong too.

MR. G. FILMON: Thank you, Mr. Chairman.

I should know this, but what was the average system cost of electricity in cents per kilowatt hour during the time of the energy freeze and the Hydro rate freeze?

MR. J. ARNASON: I don't think I can answer that question specifically, but we better try to get an answer for Mr. Filmon. Our average return today is 3.2 cents, but I can't go back to that period without someone checking the numbers more specifically. But we will bring that forward to a subsequent meeting, if that is satisfactory.

MR. G. FILMON: Mr. Chairman, I wonder if there's anybody here who does have that information? If it's 3.2 cents a kilowatt hour today, was that after the two increases, the 18 percent increase? I'm trying to get it back to a baseline of 1979.

MR. J. ARNASON: The 3.2 cents would cover the first increase that was mentioned of 9.5 percent, but has not included the most recent increase which went into effect on April 1, 1984.

MR. CHAIRMAN: Mr. Filmon.

MR. G. FILMON: So we could reduce it by 9.5 percent and it would probably get us down somewhere to around 2.9 cents a kilowatt hour.

If you were getting into the areas that we had charts on in the last meeting and it was a projection of what the value of our energy pricing was being projected at in our sales to Northern States Power and I believe the agreement starts in 1993. Somebody quoted a figure as to what the value of that energy in cents per kilowatt hour would be in 1993, based on that formula of 80 percent of the Sherco **3 installed plant. Has somebody got that off the top of their head?**

MR. CHAIRMAN: Mr. Derry.

MR. A. DERRY: I would like to make a correction at this point in my transcript, reading of transcript. In answer to that question, it says in the third year, it works out to 6.7 cents per kilowatt hour. That should have been, in the first year, 6.7 cents.

MR. CHAIRMAN: Mr. Filmon.

MR. G. FILMON: Mr. Chairman, just to recap that value that Mr. Derry just put on it of 6.7 cents per kilowatt hour was based on the analysis of the Sherco situation, I wanted to point out that, based on the forecasted rate increases that Mr. Fraser has put before us, and they are 9.5 percent in'83; 7.9 percent in'84, those two have already being instituted, then 7.9 percent in'85; 6.0 in '86, '87, '88 and so on, we would actually arrive at a rate of just under 6 cents a kilowatt hour by 1994 and that's based on rather modest figures that I think are based on their assuming inflation rates of - I had some charts in here, but my recollection is that they're assuming interest rates in the range of 10 or 11 percent and inflation rates of several percent below that, somewhere in the range of 6 or 7 percent. If, on the other hand for instance, that rate were up at 14 percent, which is what our Minister of Finance told us the other day was what the long-term rates would be in Manitoba for 15-year money, even at the present time and that was before, for instance, the projections that are under way right now of higher interest rates.

I'm told that the top economic forecasters are predicting 15 percent prime rate in the U.S. for next year. We would be looking at substantially higher rates of value for our energy here in Manitoba, costs to our ratepayers being much higher, yet locked into a contract that's based on an 80 percent of American installed capacity and operation of a plant there; so bearing no relationship, as I understand it, to the actual costs that we would have in Manitoba.

My question then for Mr. Derry is, does that mean that we are taking all the risk that the projection of interest rates will hold at 11 as opposed to - or even 10 as he indicated at the last meeting - as opposed to, say, something in the range of 14 or 15, which is being predicted by many other observers?

MR. CHAIRMAN: Mr. Derry.

MR. A. DERRY: I think you're getting into some of the sensitivity that you asked us to provide for you at this meeting and we do have some numbers on this that we're going to put out.

MR. G. FILMON: Okay. Well perhaps now's the time to put the numbers out.

MR. A. DERRY: Mr. Chairman, I had an undertaking to supply copies of the four overheads that I presented on Thursday evening and will do that at this time. This will give everybody all the information.

Also, we undertook to supply information on the supply and demand for the 1992 inservice date and for the 1991 inservice date of Limestone. We'll also pass that out. I was going to use overheads but I'll have to talk from the copies. I'm going to take them in the order that I'm passing them out here.

Mr. Chairman, I have some additional information to give out, but maybe it would be wise if we start off with the insert on the supply and demand situation for Limestone rather than hand out the other information and get it all mixed up.

If you look at the Limestone 1992 First Power Year, we have a Supply and Demand Table starting from 1991 going through to 1994. Under the supply, we have the existing system at 3,917 megawatts. The next line is Limestone. First two units in service in '92; eight units by '93; the full 10 units by 1994.

The next line, in 1991 and '92, we have 300 megawatts. That is the diversity exchange with Northern States Power that ends in 1992, so we have a total supply, in 1991, 4,217 megawatts; 4,473 in '92; 4,813 in '93 and 5,197 in '94. Now if we look at the demand side, the forecast Manitoba load - and this is the 1983 forecast - was 3,746 for '91; 3,847 for '92; 3,946 for '93 and 4,060 for '94. With the NSP sale of 500 megawatts, starting in 1993, we sold 550 megawatts; although it's a 500 megawatt sale, we have added 10 percent to bring the capacity to the border, so that it becomes 550 megawatts of load in 1993-94 and thereon for the 12-year period.

Our reserves that we carry for the loss of generation and forecast errors, in 1991 it's 12 percent of the load and it's 414 megawatts; 426 in '92; 480 in '93 and 493 in '94, so the total demand in 1991, including reserve, would be 4,160; 4,273 in 1992; 4,976 in 1993 and 5,103 in 1994.

Now if we net the supply and demand, we find out we have 57 megawatts excess in '91; 200 in '92; we are negative in '93 by 163 megawatts and we have an excess in 1994. Now this is with the 1992 first power in service of Limestone. As you can see we are short some 163 megawatts.

At the present time the plant at Brandon - there's 60 megawatts at Brandon that by 1993 will have had about 35 years service on it. It's very likely it could be retired, but we have not retired it in these numbers, so there's a possibility of 60 megawatts coming off the supply which would increase at 163.

If we turn over to the 1991 date, what we have done is move the first two units to 1991, of Limestone; the eight units would be in by 1992; and the full plant by 1993. This corrects the negative situation we had in 1993 and we now have excess of 221. By 1994 though, we're down to 94 megawatts, the same as we were with the '92 in service date. If you look at the overhead that I had supplied on Thursday, I indicated that Wuskwatim would be required - 1995.

The 896 is seven units, not eight units. There's two units, seven units and then ten units.

MR. G. FILMON: Mr. Chairman, that gives us the analysis based on capacity requirements, peak capacity requirements - I'm wondering whether the analysis based on firm energy requirements produces the same result; that is, Limestone first power required by 1992 for the Manitoba system.

MR. A. DERRY: In 1991-92 we show an excess or surplus of energy of 2,777 gigawatt hours. It is the capacity that is forcing us to put in Limestone. With the NSP sale, we have also got a guarantee of 1,500 gigawatt hours of energy, which we mentioned on Thursday night, so energy does not come as that big of problem, it is capacity.

MR. G. FILMON: I was referring to without the NSP sale. When would Limestone be required on an energy basis without the NSP sale? 1992 or is it later?

MR. A. DERRY: It would more than likely be 1992, one year later than the 1991 with the capacity.

MR. G. FILMON: Okay. So it would be 1992 or later maybe. Is there a possibility it could be even later on that basis?

MR. A. DERRY: Not according to the numbers we have here. If you want to take out the NSP 1,500, it would be 1992.

MR. G. FILMON: Mr. Chairman, are any of the agreements with industrial users in a form that allows for them to be shut off, in other words interruptible power supplied to the industrial users in return for getting a more favourable rate?

MR. CHAIRMAN: Mr. Fraser.

MR. M. FRASER: We have the authority to negotiate such a rate as of this year. There are no customers taking advantage of it at this time.

MR. G. FILMON: So, Manitoba Hydro has no customers who can have their power turned off on a short-term basis, like say during a peak demand period of time in the middle of winter in lieu of getting some rate agreements or for any reason. It's just simply not in any current agreements.

MR. M. FRASER: No, it's not.

MR. G. FILMON: Are there any potential customers for that kind of agreement within the Manitoba Hydro commercial industrial system at the moment?

MR. M. FRASER: We think there will be a very small number if there are any. We are talking to two or three at the moment, but as I say, we've only had the authority to offer the rate for a matter of weeks now. So I don't expect that there will be any great rush of customers to take advantage of it, but we are talking to a few.

MR. G. FILMON: Is it conceivable that there might be a sufficent number of customers to aggregate to a demand of about 160 megawatts?

MR. M. FRASER: I don't believe it would come anywhere near that now.

MR. G. FILMON: Would it be a reasonable risk to take since part of the demand shown on this sheet is 480 megawatts of reserve capacity that you could eat into that reserve on a temporary basis for a year or so if it meant you saving $300 million in interest and operating cost for the advancement of Limestone?

MR. J. ARNASON: I don't think I would want to take that risk. As an example, Mr. Chairman, in the last peak period, when we had a peak of 2889 last December, we had some 389 megawatts out of service or derated. That was over 12 percent of the peak that occurred in December and our reserve policy is 12 percent of peak; and it's for two purposes, one for taking care of emergencies such as unit outages and the second component, about 4 percent of that 12 is for variations and load forecast. So, it's there for a good purpose and I don't think you should use that for the purpose you just mentioned. It's too great a risk.

MR. G. FILMON: Mr. Chairman, you mean it's not worth the potential savings of $300 million to take that risk on a very short-term basis?

MR. CHAIRMAN: Mr. Goodwin.

MR. C. GOODWIN: Mr. Chairman, I think we've been posed a question that we don't have the answer to here. We have considerable detail on the effect of advancement of three generating plants for the Northern States Power sale. The question of isolating one plant advancement and trying to guess at the constant benefits would take a little time and I don't think we can produce that tonight.

MR. G. FILMON: Mr. Chairman, this set of figures that has been given to us of the capacity requirements and so on, is based on the current projected growth of something in the range of 2.8 percent. As I understand it, if we were to assume only 2 percent, it would push it back another four years. That is, the requirement for Limestone, at least, and presumably everything else would back up along the way, Wuskwatim and Conawapa and so on, so that the figures that are given to us here of the cost for advancement for these facilities, $321 million discounted to 1984 could be multiplied by five if the advancement was five years instead of one year on Limestone, and as well, proportionately the others.

MR. CHAIRMAN: Mr. Derry.

MR. A. DERRY: Mr. Chairman, that was another hand-out that I had that I indicated I would put out. But before that one, I have an additional one that I was asked to provide information on Limestone capital costs, which I would like to distribute.

MR. G. FILMON: Mr. Chairman, while this is being passed out, may I suggest that a lot of these numbers will take a fair bit of time for analysis and I think we're probably getting to a stage of having committee rise very shortly. I just wanted to briefly ask a few questions that came out of the transcript of the last meeting, points of clarification as I read them now and I wonder whether or not the various presenters intended what appears on the record. I think for the most part, my questions have to do with statements that were made by Mr. Eliesen, so I'll just ask a couple of these questions.

Mr. Eliesen said on Page 63 of Hansard of the Public Utilities Committee meeting of June 21st, that the first board of directors of the Manitoba Energy Authority was appointed on March 18, 1981 and was chaired by Mr. Paul E. Jarvis, the then Deputy Minister of Energy and Mines. It's not a major point, but my impression was and I'll certainly stand to be corrected, that the first Chairman of Manitoba Energy Authority was the Honourable Don Craik and that Mr. Jarvis was a member of that committee, but not the chairman.

MR. CHAIRMAN: Mr. Eliesen.

MR. M. ELIESEN: Mr. Chairman, Order-in-Council dated 253/81 March 18th, appointed the following Board of Directors: Chairman, Paul E. Jarvis; Vice-Chairman, G. Alan MacKenzie. Members: Roderick C. Bailey, Gerald D. Forrest; John E. Mason; H. Douglas McRorie and John L. Burns.

On September 30, 1981 Order-in-Council 925/81 resulted in the estabishment of a newly appointed board of directors. Chairman - Donald W. Craik, Vice-Chairman - G. Alan MacKenzie, Members - Leonard H. Shebeski, Paul E. Jarvis, Roderick C. Bailey, Gerald D. Forrest, John E. Mason, Malcolm G. Anderson and John L. Burns.

Thank you.

MR. G. FILMON: I wonder if Mr. Eliesen could indicate - the present board is chaired by himself with Mr. Cherniack, the Chairman of Manitoba Hydro as Vice-Chairman and Mr. Arnason on the board, Mr. Allan Puttee who is the Assistant Deputy Minister of the Energy Division is also on the board. I wonder if Mr. Eliesen could indicate Mr. Puttee's qualifications in terms of training experience.

MR. M. ELIESEN: Mr. Puttee is a Ph.D. Economist from McGill University. I don't have his complete C.V. in front of me, but he worked for the Manitoba Government as an economist, he worked for the British Columbia Government as an economist, he worked for

the Federal Department of Finance as a senior economist and he was recruited on an inter-change program with the Government of Canada as Assistant Deputy Minister of Energy.

MR. G. FILMON: The final member that's listed in Hansard as being a member of the Manitoba Energy Authority is Ms. Patty Park. I wonder if the Minister can indicate her background and qualificiations?

MR. M. ELIESEN: I don't have her curriculum vitae in front of me, but I believe that question in terms really of the composition of the board of directors should really be addressed to the Minister since it was the Minister who appointed the board of directors of the authority.

HON. W. PARASIUK: Yes, Patty Park is my special assistant. I believe John Burns was the special assistant to the previous Minister. He was on the board of the Manitoba Energy Authority . . . special assistant was on the board of the Manitoba Energy Authority . . . (inaudible) . . .

MR. G. FILMON: Can the Minister indicate her training and qualifications please?

HON. W. PARASIUK: Yes, I don't have it off the top of my head. I know that she has a university education and that she's been involved in organizing negotiating work over the past. I'll certainly look up that information and look up the information of the qualifications . . . (inaudible) . . .

MR. G. FILMON: Another question for Mr. Eliesen.

At the bottom of Page 63 in reference to the agreement which has recently been signed with Northern States Power of Minneapolis, Mr. Eliesen said, "For Manitoba it is, I believe, a good business deal." My question to Mr. Eliesen is what is his background in business?

MR. M. ELIESEN: The comment on a good business deal reflected our observations and analysis of the kind of returns that other utilities in Canada have been obtaining from their sales to U.S. Utilities. The comment, "A good business deal," would be my understanding if this deal which we believe it to be, the best benefit cost ratio that has ever been consummated between a Canadian and U.S. Utility, in my judgment is a good business deal.

MR. G. FILMON: Is Mr. Eliesen, by that saying that he has no business background? I did not hear him answer my initial question.

MR. M. ELIESEN: I attempted to answer the question in the context of the utilization of the phrase "good business deal." Any deal which gives a profit of $1.7 billion on $3.2 billion revenue in my judgment is a good business deal.

MR. G. FILMON: Can Mr. Eliesen indicate what business experience he has on which to make judgments on business deals?

MR. M. ELIESEN: Mr. Chairman, I've been extensively involved as an economist working with various levels of government. Going back to the Federal Department of Finance, the Federal Department of Industry and Commerce, working here in Manitoba as Assistant Deputy Minister of Finance and then Secretary of the Cabinet, and in a similar position in British Columbia. I've been an economic consultant and I've been involved in extensive industrial evaluations and that in part reflects some of my background and my ability to make judgments and observations as well as analyses on these kinds of transactions.

MR. G. FILMON: Since I didn't hear any business experience in that resume, Mr. Chairman, I guess we must assume that there is none.

MR. CHAIRMAN: Order please. Mr. Parasiuk.

HON. W. PARASIUK: I'm surprised at what Mr. Filmon is implying. Is he implying that if anyone has had experience in government over a 15 or 20 year period, dealing with industrial developments and industrial dealings, that that does not constitute business experience? I just read through the C.V. of a person in fact who, I think - and I take this out of the Financial Times - who is being lauded as a very successful businessman in Toronto whose total previous experience constituted working for the Federal Government. I'll certainly pick that out. I do know that in a number of instances people have moved from the government activity involved in business and served in the private sector and done it particularly well. Mr. Filmon seems to be implying that one only has business experience if one deals only in the private sector. That's a position, I guess, one can put forward, but it certainly doesn't mean that Mr. Eliesen or anyone who has spent a lot of time working for government does not have good business experience.

MR. G. FILMON: Mr. Chairman, the Minister, having a similar history of experience and background to Mr. Eliesen would, I'm sure be very sensitive to that point.

My next question for Mr. Eliesen is that he's quoted, on page 64, as saying that, "The capital charges of the coal-fired plant," referring to Sherco III in the previous paragraph, "The capital charges of that coal fired plant are higher than the capital charges of Limestone."

I'd like some clarification on that because the information that we have in the agreement that has been signed between NSP and the Government of Manitoba indicates that in the event that Sherco III does not begin commercial operation prior to May 1st, 1993, C.I. shall be $1,294 per kilowatt - and that's the Capital Investment, I believe, C.I.- Capital Investment shall be taken as $1,294 per kilowatt. That compares to a cost, according to the information given at the last committee meeting, of $2,350 or almost double that capital investment per kilowatt for Limestone. I'm wondering how Mr. Eliesen reconciles those two statements.

MR. CHAIRMAN: Mr. Eliesen.

MR. M. ELIESEN: Mr. Chairman, we can provide a detailed breakdown confirming my general observations

and tables which we can present to this committee tomorrow morning; but the basic observation that I make stands and can and will be substantiated.

Included in my remarks is reference to the extensive capital charges charged by NSP which are higher - and here I'm referring to interest rates and depreciation and debt ratios - but we'll provide that entire breakdown tomorrow morning.

MR. G. FILMON: Mr. Eliesen is saying that his definition of capital charges is not the capital costs, but that he's talking now about interest rates and all sorts of other things as opposed to the capital investment in that plant.

MR. M. ELIESEN: Mr. Chairman, I believe the figures being referred to are 1988 dollars that Mr. Filmon's referring to and the tables, as I say, that we will present tomorrow will clearly show that the total capital costs, which includes interest and the other factors I mentioned, are estimated to be higher than the capital costs for Limestone. That's reflected in the estimates, if you recall, that Mr. Derry provided, in which the estimated mill rates, for example, of the Sherco Plant were about 67 mills, compared to 54 mills for the Limestone plant.

MR. G. FILMON: Taking Manitoba Hydro's assumed rate of escalation, of capital escalation, between 1988 and 1993, and there assuming, for the information of Mr. Eliesen, 7 percent, even taking that into account and multiplying it times the 1,294, you still come out to something substantially less than the cost of installed capacity of Limestone. You come to something in the range of 1,700 or 1,800, still considerably less than the $2,350 per kilowatt installed in Limestone.

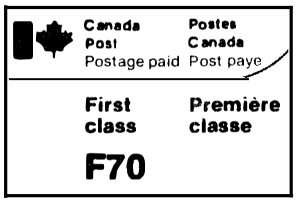
MR. M. ELIESEN: Mr. Chairman, we will bring all the figures to the committee tomorrow morning and provide that detailed explanation.

MR. G. FILMON: Mr. Chairman, we have many questions and I know that there's a great deal more information that we asked for that is yet to be put on the record, so we'll wait for that information tomorrow morning and carry on from there.

I move committee rise.

MR. CHAIRMAN: Committee rise.

COMMITTEE ROSE: 11:00 p.m.


Canada Post
Postage paid
Postes Canada
Post paye
First class
Première classe
F70