

LEGISLATIVE ASSEMBLY OF ALBERTA

Title: **Tuesday, November 6, 1984 2:30 p.m.**

[The House met at 2:30 p.m.]

PRAYERS

[Mr. Speaker in the Chair]

MR. SPEAKER: The tragic loss of our late colleague, Grant Notley, Leader of the Opposition, has thrust this House and its Speaker into a situation which is difficult and without useful precedent. We have at this moment no Leader of the Opposition and no clear indication of who that should be.

There appear to be three possibilities:

1. To designate the Independents as the Official Opposition, which would make the leader of the Independents the Leader of the Official Opposition;
2. To designate the hon. Member for Edmonton Norwood;
3. To designate no one as Leader of the Opposition and to arrange a sharing of salaries as permitted by section 47 of the Legislative Assembly Act.

None of these would be totally wrong; neither would any of them be totally right.

As recently as March 11, 1983, it was necessary to deal with such a question in a different context. As is well known, we had at that time an opposition consisting of two equal parts. Because of that equality within the House, it was necessary to try to find outside the House a possible basis for selecting an Official Opposition.

Such a basis was found in the results of the 1982 provincial general election. These results show that New Democratic Party candidates in that election received a far greater number of votes than those cast for any other nongovernment party. Hence it seems likely to the point of certainty that a larger number of voter concerns from around the province, and thus a larger amount of work, would be directed to the NDP members rather than to the Independents.

It therefore seemed just and equitable that the additional funding and staffing provided for the Leader of the Opposition should go to the leader of the New Democratic Party, and that is what was done on the basis of the statement made to this House on March 11, 1983.

That statement also acknowledged that the selection of an Official Opposition at that time rested on a very narrow basis and that a change in opposition numbers in the House could or would result in changing the designation of an Official Opposition. In this regard the following points must be recognized:

1. The present change in number in the opposition has not resulted from a resignation, retirement, or change of allegiance in this House but from the sudden death of a member.
2. The number change may be temporary, depending on the result of a by-election which must be held by April 17, 1985.
3. The Legislative Assembly estimates approved by this Assembly last spring provided Official Opposition funding for the current fiscal year to March 31, 1985, on the basis of the NDP being the Official Opposition.
4. As a result of that funding, certain staffing and other arrangements are in place.
5. There is no provable reason to assume that the prepon-

derance of opposition work resulting from certain voter concerns or inquiries will now shift from the NDP to the Independents.

6. The statement on the Official Opposition made to this House on March 11, 1983, was not intended to refer to a temporary or short-term change in numbers. The simple reason is that such a very temporary situation was not expected or even foreseen.
7. The designation of the hon. Member for Edmonton Norwood as Leader of the Opposition would mean, in effect, a leader in this House without followers in the House. When the late and respected Ernest Watkins was the only member of his party in this House, he remarked in regard to the possibility of his being designated a leader in the House that he could talk to himself, he could be beside himself, but he could not lead himself.
8. What we are concerned with here, however, is a special workload and function deriving in part from our *Standing Orders*. This function is quite apart from leading a group. In other words, here we are not concerned so much with leadership of a group in the House but with additional functions, staffing, and funding which should be available to someone in the opposition.

Referring now to the Legislative Assembly Act, section 47, there is authority for the Speaker to divide among two or more members the salary which would otherwise be payable to the Leader of the Opposition, if there were one. Under the circumstances, this would not solve the problem and would not give us a Leader of the Opposition as contemplated in our *Standing Orders*.

What has occurred to this House is a disruption which should be minimized to the extent possible.

It is not for a Speaker to guess when either a general election or a by-election may be held. However, there are certain legal and practical considerations which are known to anyone who cares. Accordingly it seems safe to say that the date of the by-election will be very much closer to the end of the fiscal year than we are today. Disruption in staffing, funding, and other arrangements will likely diminish as we get closer to the end of the fiscal year.

Pending the outcome of the forthcoming by-election, and for all the foregoing reasons, I recognize the hon. Member for Edmonton Norwood as Official Leader of the Opposition for the time being.

I thank the members and staff of the opposition offices and our Parliamentary Counsel for their friendly assistance in dealing with this difficult question.

head: INTRODUCTION OF VISITORS

MR. HORSMAN: Mr. Speaker, it's my honour today to introduce to you, and through you to members of the Assembly, some distinguished visitors to the province of Alberta from another North American country, namely the Republic of Mexico. Alberta, Canada, and Mexico have had friendly relations that are being improved upon by the visit to our province of His Excellency Jose Andres de Oteyza, who is now standing in your gallery. I would like to have him joined by Mr. Jose Luis Atristain, who is the trade commissioner in Toronto, as well as by a distinguished Albertan, Angus MacDonald, who has been appointed by the government of Mexico to act in northern Alberta as the honorary consul for the Republic of Mexico. Will members please welcome these distinguished visitors.

head: **INTRODUCTION OF BILLS****Bill 96**
Judgment Interest Act

MR. STILES: Mr. Speaker, I request leave to introduce a Bill, being the Judgment Interest Act.

This Bill is essentially similar to the Act introduced as Bill 6, the Pre-judgment Interest Act. It contains the same provisions and principles, but in addition it contains provisions for the payment of interest after judgment as well as before.

[Leave granted; Bill 96 read a first time]

MR. CRAWFORD: Mr. Speaker, I move that Bill No. 96 be placed on the Order Paper under Government Bills and Orders.

[Motion carried]

head: **TABLING RETURNS AND REPORTS**

MR. MARTIN: Mr. Speaker, at his request, I rise to table for the information of all members a copy of a communication I received from Mr. Douglas Blain, until recently the Clerk Assistant in this Assembly. The memo has to do with the untimely death of the former Leader of the Opposition.

MR. GOGO: Mr. Speaker, I wish to table with the Legislature the 1983-84 annual report of the Alberta Alcoholism and Drug Abuse Commission. Copies have been made available for all members.

MR. JOHNSTON: Mr. Speaker, I file motions for returns 209 and 210, as well as the annual report of the Northern Alberta Institute of Technology to June 30, 1983.

head: **INTRODUCTION OF SPECIAL GUESTS**

MRS. CRIPPS: Mr. Speaker, I'd like to introduce to you, and through you to the members of the Assembly, 100 students from St. John's School at Genesee, in my constituency. They are from grades 7 to 12 and are accompanied by Headmaster Peter Jackson, organizer Paul Woolnough, Assistant Headmistress Sheila Woolnough, Assistant Headmaster Simon Jaynes, Mr. Keith McKay, Paul Nordah, Mr. Blaine Thauberger, Patrick Williams, Lois Nelson, Kevin McAsh, Dave Scott, Miss Hilary Noblett, and Mr. Colin Belton.

They are from all areas of the province, Mr. Speaker. Many of them had the opportunity to meet with their members, and I understand they've had good discussions. I know the students from St. John's would like me to thank Cathy Finlayson for all her work in arranging the meetings.

I also note that some of the members have met with you, Mr. Speaker, to discuss the constitution for their model parliament, and I understand that you gave them some excellent suggestions. Mr. Speaker also told me that he'd written a number of pages and decided nobody would go through it, so he'd rather talk to them.

I'd like to draw members' attention to the fact that I'm wearing a St. John's uniform today, quite by lucky accident.

They're seated in both galleries. Would they rise and receive the warm welcome of the House.

MR. STROMBERG: Mr. Speaker, this afternoon we have in our members' gallery some 30 students from the Hay Lakes

school, situated in my constituency, along with their teacher Mr. Morley Dunlop. I ask Mr. Dunlop and his students to rise and receive the welcome of this Assembly.

head: **ORAL QUESTION PERIOD****Natural Gas Feedstock Pricing**

MR. MARTIN: Mr. Speaker, I'd like to direct my first question to the Minister of Energy and Natural Resources. It has to do with the natural gas prices to the petrochemical industry announced yesterday. Has the minister asked his officials for a study of the Alberta border price charged to the U.S. gas export market as compared to the natural gas price to Alberta's petrochemical producers?

MR. ZAOZIRNY: Mr. Speaker, I'd be happy to comment about that situation. As hon. members will be familiar with, since July 7 this year we have had in place a new natural gas export policy in Canada, announced by the federal government after a great deal of consultation with the producing provinces and industry. Under that new policy, there is much greater flexibility in the price at which natural gas can be sold into that vital U.S. export market.

That having been said, Mr. Speaker, the fact remains that under the current export policy there is established a floor price based upon the Toronto city gate reference price. That was not part and parcel of the recommendations of industry in the producing provinces but is part of the current export policy. The reality of the situation is that when one compares that export policy and the price at which gas can be sold into the U.S. market with the circumstances here in Alberta, there is absolutely no question that the circumstances in Alberta provide a marked opportunity and advantage for our Alberta-based industry which we wholeheartedly support and which has been a conscious part of the policy of this government to ensure that industry based in this province has the opportunity to purchase feedstock at a favourable price.

MR. MARTIN: A supplementary question to the minister, Mr. Speaker. In our discussions with natural gas producers in the province, they've indicated some concern over the fact that at present there's roughly — it varies, as the minister well knows — a \$1 per 1,000 cubic feet difference between the U.S. gas exports and the prices paid by the domestic petrochemical industries. Has the minister received any projections as to whether gas producers will be looking in future toward selling their gas to the U.S. market rather than to the petrochemical industry in this province?

MR. ZAOZIRNY: Mr. Speaker, there's certainly no evidence that that would be the case. A very active market exists here in the province. One of the major advantages of sales to our domestic market is the fact that, with the petrochemical industry for example, it provides a year-round and constant market for natural gas without the peaks and valleys that obtain by virtue of other arrangements.

The reality of the situation is that in addition to that type of advantage to domestic sales, there is a very significant available supply of natural gas in the province. Our reserves are in the order of some 70 trillion cubic feet overall. We're satisfied that our current reserve situation ensures that we will be able to service not only the domestic market, both within and beyond Alberta's borders, but the export market. As the sales firm up, which we are seeing happen already, the prospects and oppor-

tunities for further natural gas exploration and development are very promising.

MR. MARTIN: A supplementary question, Mr. Speaker. I would indicate to the minister that some of the gas producers told us that that's precisely what they're going to do — look toward the American market.

I'd like to go to the National Energy Board's September report and quote two sentences, because they apply directly to what we did here yesterday.

The prospect exists for a substantial expansion in production in the Middle East. Accordingly, the prospects for the Canadian industry and, correspondingly, its expansion plans are considerably more modest than they were even two years ago. Projections of a petrochemical feedstock demand are particularly uncertain.

My question to the minister is: what is the government's assessment of this disturbing report, which came out as late as last September?

MR. ZAOZIRNY: Mr. Speaker, the hon. Minister for Economic Development may wish to supplement with respect to the prospects for the petrochemical industry.

In addition to the comments I've already provided, I should add the very important observation that there exists in this province a 25-year domestic supply arrangement whereby we first of all ensure that there is an ample supply of natural gas available for the needs within Alberta. That also prevails with respect to Canadian demand before natural gas is afforded for sale into the U.S. market. So that is very much part and parcel of the existing policy, to ensure that the Alberta and Canadian needs can be met. Only beyond that will natural gas be exported. My comment on that is simply that we are satisfied that there is an ample supply to satisfy all those market circumstances.

With respect to the prospects for the petrochemical industry, I invite my colleague to comment.

MR. PLANCHE: Mr. Speaker, just to supplement that adequate answer, the international competitive circumstance of petrochemicals is something we're going to have to live with. The players are mainly multinationals, with the exception of a couple of very strong Canadian players. They will make decisions on a worldwide demand, based on their preparation to invest in a worldwide supply. There has been no indication from those folks that they're necessarily prepared to trade off the price of feedstocks for the security of supply that Canada offers. There is also no question that we control neither the demand nor the supply of petrochemicals. We've got to concentrate on the economics of getting it to tidewater, and that's what we're going to do. So to forecast a competitive circumstance is difficult. We'll have to deal with the Middle East as a competitor in a world situation.

MR. MARTIN: A supplementary question to either minister. I think this is the crux of the problem. The Middle East has ample feedstocks and, as you said, Alberta does also. But the same argument could be made. They are saying that it would be very competitive in the long range. My question is: are we not in the process of perhaps having to subsidize an industry for many, many years because of that competition?

MR. PLANCHE: Mr. Speaker, we're not subsidizing an industry at all; we are doing some interim financing to allow them to get to a market-driven price level within the province. The reason they're not there now is an anomaly in law, which my

colleague will correct through the amendment he proposed yesterday. So that's simply not the issue.

MR. MARTIN: You can call it interim financing or subsidies; I'm not concerned about semantics. But with the market indicated by the National Energy Board, my supplementary question to the minister is: are we not in danger of having to interim finance for many, many years to keep our industry competitive? This will cost the taxpayers of Alberta a lot of money.

MR. PLANCHE: Mr. Speaker, the answer is, clearly not. What we're doing is affording this segment of the petrochemical industry the same access to feedstock that other segments of the petrochemical industry already have. The announcement for interim financing while the private sector gets together on their contracts for the longer term has a sunset of July 1986, and that's firm. We expect the producers and consumers of ethylene to have their arrangements in place by that time.

MR. MARTIN: It seems to be by *hope*, more than anything else. My supplementary question to either minister is: does either minister's department have any objective study to show that the volume of natural gas sales to the petrochemical industry will offset these lower prices after July 1, 1986?

MR. PLANCHE: Mr. Speaker, we're continually assessing the competitiveness of feedstock. There is nothing to indicate that they will be lower or higher or anything else. What we're striving for is a marketplace pricing structure.

It's also well to remember that the Middle East is primarily depending on associated gas. If their petrochemical industry requires gas to be drilled for as gas for feedstock, then they're going to be in a very different pricing situation. The decision they will have to make is whether or not to subsidize their feedstock prices.

We're counting on security of supply, market-driven price of gas, and political stability. The people who are players and investors have indicated to us that that's a very real consideration in their future planning. We're optimistic about the results.

MR. MARTIN: Perhaps some indicators from around the world would not be so optimistic for the province.

My supplementary question is back to the Minister of Energy and Natural Resources. The main beneficiary of the government's latest gas pricing agreement will be Alberta Gas Ethylene Company Limited, which I point out is 100 percent owned by Nova. Last year Nova reported \$50 million in net profits from its petrochemical division. Can the minister advise the House what considerations led to Tuesday's natural gas pricing announcement, given the healthy profit shown by Nova in the previous year?

MR. PLANCHE: Mr. Speaker, the fact is that the benefit won't flow to the ethylene plants at all. If the hon. Leader of the Opposition would read the press statement and understand the issue a little better through his research before he asks the question, he would know that the people to whom the benefit will accrue are the users of ethylene and that they are in a world competitive circumstance.

MR. MARTIN: A supplementary.

MR. SPEAKER: Followed by a supplementary by the hon. Member for Drayton Valley, and then the hon. Member for Red Deer.

MR. MARTIN: I'd follow up on that, but seeing I only have one more ... In the ministerial statement yesterday, the minister quoted the government's white paper in stating that two of the most promising areas in diversification and creation of new jobs in Alberta are in agricultural processing and petrochemicals. According to an April 1984 report prepared by the petrochemical industry in Canada, a gross investment of \$510,000 is required for every job created in the petrochemical industry, and that's using 1982 figures. My question is: what is the government's projection of the number of new jobs that will be created by the new price marketing agreement?

MR. PLANCHE: Mr. Speaker, first of all, whatever the figure is, the \$510,000 is not a government investment; it's a private-sector investment. We look forward to an industry that's treated the same as any other intra gas upgrader within the province. We now have some 6,000 people directly employed in skilled jobs. Some of those jobs are at risk if this anomaly is not corrected. Clearly the future of expansion within the province is in doubt unless this anomaly is corrected, so it's important that the 6,000 people who are now in place and all the service and ripple effect that that causes are protected, simply by giving them the same access to pricing that others in petrochemicals have within the province.

MRS. CRIPPS: A supplementary, Mr. Speaker, going back to an earlier question by the Leader of the Opposition. The problem is the market for gas and the lack of drilling in the province because of that. What percentage of the natural gas available is shut in at the present time in the province of Alberta?

MR. ZAOZIRNY: To give a precise answer, Mr. Speaker, I'd have to take the question as notice.

MR. McPHERSON: A supplementary question, Mr. Speaker, following the question by the Member for Drayton Valley. Can the Minister of Energy and Natural Resources give any indication of the percentage the Alberta-based petrochemical industry consumes in terms of domestic consumption in the province of Alberta?

MR. ZAOZIRNY: Mr. Speaker, when that industry is operating at full capacity, I believe the number is 38 percent of the Alberta domestic consumption.

MR. McPHERSON: A supplemental, Mr. Speaker. Could the minister give any indication of the increased amount of consumption that would take place if the petrochemical industry were able to carry forward its cancelled or delayed projects, worth approximately \$4 billion, which were originally announced back in 1981?

MR. PLANCHE: Mr. Speaker, I can't give a precise number for that, simply because that industry is always in flux and growing, and the decision-making changes from time to time. The numbers are as high as from 80,000 billion cubic feet to 100,000 billion cubic feet in incremental sales. But I can't be very precise at this time.

MRS. CRIPPS: Mr. Speaker, maybe I can rephrase my question and ask the minister if he's been given an indication by the gas producers of the province that there are adequate gas supplies for both the petrochemical industry in the province of Alberta and the export commitments they expect to be able to make.

MR. ZAOZIRNY: Mr. Speaker, I think it's fair to say that adequacy of supply has not been the issue in the natural gas

industry in the last year or so. As a matter of fact, we've been focussing on markets, and I think the announcement made yesterday by my colleague the hon. Minister of Economic Development is very much consistent with our endeavours to both sustain and enhance markets for natural gas. We believe that with the combination of increasing domestic sales outside Alberta, to other parts of Canada, and into the United States, and moves such as the one announced by my colleague, the prospects for increased consumption of natural gas are very encouraging. That will logically lead to a significant upturn in natural gas drilling activity in this province in the months and years ahead, which is of course something we're striving to ensure happens.

DR. BUCK: Mr. Speaker, the minister seems to be taking this a bit flippantly. In the days when we had good, responsible government in this province, we had a 50-year reserve, and then it went down to 40. I believe the figure of 30 years has now been used. Can the minister indicate to this Assembly, and assure the people of this province, that we have a minimum 30-year reserve of natural gas down the road before we use it, sell it, or whatever?

MR. ZAOZIRNY: Mr. Speaker, again I'm somewhat puzzled by the hon. member's concern about adequate supply. I don't know where they've been for the last couple of years. The problem is one of markets.

Just to give a very simple response to the question in a very serious way, Mr. Speaker, the current estimated known reserves of natural gas in Alberta are in the order of some 70 trillion cubic feet. That is a conservative figure which doesn't speak to the level of reserves that can be brought on stream with a reasonable increased measure of drilling activity, so that number has to be looked at in that context. Our total gas sales in the preceding year were in the order of some 2 trillion cubic feet. Again I just use those numbers in terms of consumption in the preceding year and known reserves without taking into account the increase in those reserves that can readily be brought about through an increase in drilling activity.

To sum up, Mr. Speaker, I don't think there's any question that the circumstances of the late 1970s and early 1980s have demonstrated that Alberta and the western Canada sedimentary basin have ample supplies of natural gas. The circumstance is one of marketing. As that marketing succeeds, we will see increased drilling activity and the sustaining and enhancing of those supplies and reserves.

DR. BUCK: Mr. Speaker, can the minister guarantee this Assembly and the people of this province that there is at least a 30-year supply in reserve? That was the question. Never mind the trillions and the zillions and the markets. Is the minister able to guarantee the people of this province that there is at least a proven 30-year reserve of natural gas in this province?

MR. ZAOZIRNY: Mr. Speaker, I'm not in the habit of granting guarantees of that nature. I can simply advise the member that when the Energy Resources Conservation Board is going through the process of examining any export applications and gas removal permits prior to their coming to the government, it very much takes into account that reserve situation. That is a standard procedure that is conducted in the normal course of the approval of a gas removal permit.

DR. BUCK: Mr. Speaker, directly to the Premier. Using the present figures and some projection, can the Premier, as chairman of Executive Council and the Premier of this government.

assure the people of this province that there is at least a minimum 30-year gas reserve in this province? Yes or no?

MR. LOUGHEED: Mr. Speaker, one of the few positive accomplishments of our predecessors in office was the Energy Resources Conservation Board, and we're pleased to rely on their good judgment.

DR. BUCK: Mr. Speaker, again to the Premier. Is the Premier willing to answer the question about the people of this province having at least a 30-year reserve of natural gas, or is he not?

MR. LOUGHEED: Mr. Speaker, I answered the question.

DR. BUCK: In other words, he doesn't want to because maybe he doesn't know or care.

Youth Unemployment

MR. MARTIN: I'd like to direct the second question to the hon. Minister of Manpower. It has to do with reported quotes in *The Calgary Herald* of a speech delivered in Calgary as part of the kickoff to Canada Career Week. I'll quote the minister, Mr. Speaker, because I think it's important in terms of government policy.

I believe we have a responsibility to ourselves and others to think and talk positively about the future, especially when we're dealing with young people.

Young people are very impressionable and easily influenced by the mood of the moment.

They need to be told the picture is not nearly as black as it's sometimes painted . . .

SOME HON. MEMBERS: Order.

MR. SPEAKER: With great respect to the hon. member, I had misgivings about the approach when it started. It's a pretty well-known principle in the question period that one doesn't ask about statements made outside the House. Instead the custom is to ask the question directly about the topic.

MR. MARTIN: Mr. Speaker, I appreciate that, but it has to do with government policy. Just one more: "I'm a firm believer in mind over matter."

SOME HON. MEMBERS: Order.

MR. MARTIN: Can the Minister of Manpower confirm that these remarks are actually representative and accurately describe, at least in part, his department's policy with regard to youth unemployment?

MR. ISLEY: Mr. Speaker, I think I can verify that what the hon. Leader of the Opposition just read was part of the speech I delivered in Calgary yesterday morning. If he would like the balance of it, I would be pleased to deliver it to his desk.

MR. MARTIN: That's not my question. I'm sure it will go down as one of the great speeches of all time, and people will be buying it after the minister is defeated in the next election.

Are these statements the minister made representative of the government's policy, and is this a new thrust in terms of dealing with youth unemployment in the province?

MR. SPEAKER: I think we really should have regard to the rule that the same question shouldn't be asked twice know

we had an example of it just a moment ago, when the same question was asked three times. But perhaps we could get back down to one.

MR. ISLEY: Mr. Speaker, I'd be quite prepared to respond to the direct question. Those comments were made in conjunction with the opening breakfast for Canada Career Week, which is running nationwide on the theme: stay ahead with a good attitude. That theme grew out of a theme developed by the Alberta Career Week committee last year, and I'm proud that the entire nation accepts it.

Certainly it is part of the policy of the Department of Manpower and this government that people should think positively. You don't have to think negatively just because times are difficult and because you're facing difficulties. You will still have more success in life if you think positively.

MR. MARTIN: I'm sure the unemployed, the people facing suicide statistics and all the rest of it, will love that answer.

Understanding these bold new initiatives from the minister's department, what steps are being contemplated by his department to ensure compliance with this new positive attitude? For example, are we going to make cheerfulness compulsory for people under 21? Are we going to hand out rose-coloured glasses to everybody? What are we going to do with this new policy?

MR. SPEAKER: If the hon. member has a serious supplemental, he might go to that.

MR. MARTIN: I thought it was quite serious. I'm specifically asking what they are going to do with this new policy of positiveness.

MR. ISLEY: Mr. Speaker, we are going to implement as efficiently and positively as possible the Alberta youth employment and training program, of which I'm sure the hon. member is fully aware. We made a \$123 million commitment over the next 30 months to recent graduates of our Alberta postsecondary institutions and to recent high school graduates. For the young people out there, I'm sure that was positive news and will be received in a positive mood.

MR. MARTIN: A supplementary question to the minister. The latest statistics estimate youth unemployment at somewhat over 50,000 at this particular time. Is it the assessment of the government, and particularly the minister's department, that if these unemployed youths had the right attitudes, they could all find permanent employment?

MR. ISLEY: Mr. Speaker, the answer to that question would definitely be no.

MR. MARTIN: That's interesting; we finally got to it. In other words, the speech didn't mean anything.

A supplementary question. Given the minister's faith in mind over matter, can he describe what exertions of his will he's currently undertaking in an effort to reduce the presently ruinous levels of youth unemployment in this province?

MR. SPEAKER: I have difficulty with that question, and I was hoping the hon. leader would have as much difficulty in asking those questions as I have in dealing with them. The hon. leader is asking a question which obviously could take the rest of the question period, in the form of a reply listing the various steps

that are being done. It seems to me it should be a little more specific than that.

MR. MARTIN: Mr. Speaker, I'll just leave the mind over matter. That's what he believed in, and I thought he would have something for us.

I'll go to another question. The minister also announced yesterday that his department is preparing a film designed to motivate young Albertans to start independent businesses. I understand it's due for release in January. Will this film also be shown to the 748 businesses that declared bankruptcy in Alberta in the first eight months of this year, in an attempt to improve their attitudes?

MR. ISLEY: Mr. Speaker, just to put some clarity on the situation. Under Alberta Manpower we have the Alberta career planning division, which supports the Alberta career centres and prepares a variety of materials for counsellors to use in dealing with Albertans of all age levels who show up at the career centres. There are booklets on the transition from school to work. There are booklets on making a mid-life career change — booklets many of us in this House will probably read with interest.

Currently we are working on an entrepreneurial film to be used as a counselling device. That film will recount some of the experiences young people have had setting up their own businesses and point out some of the difficulties, the pitfalls. A lot of it was developed from venture programs that were carried on with young groups, and even older groups. When I'm talking about young people, I'm not talking about school-aged children. I'm talking about people into their mid-20s and 30s.

Mr. Speaker, we would be pleased to allow the hon. Leader of the Opposition to view that film when it is ready. It may give him some understanding of the business world and the free-enterprise system.

MR. MARTIN: Mr. Speaker, I have one final supplementary for the mind-over-matter minister. It has to do with career change, and I want to be positive to the people of Alberta. It's a very serious question. Has the minister given any thought to resigning because of his statements and his absolute, total failure in dealing with unemployment in this ...

MR. SPEAKER: Order please. I must put this question in the same category as its predecessor, which I regret not having interrupted.

MR. PAPROSKI: A supplementary, Mr. Speaker. Could the Minister of Manpower please outline the intent of Canada Career Week in this province?

MR. ISLEY: The intent of Canada Career Week, Mr. Speaker, is to create in people an increased awareness of the importance of career planning. I specify career planning, which is not the same thing as job search. Job search is part and parcel of career planning.

MR. PAPROSKI: A supplementary, Mr. Speaker. Could the minister please outline who is involved in organizing Canada Career Week?

MR. SPEAKER: Order please. The previous question was not in order, and this one is along the same line. Surely there has been enough publicity about this week that the minister doesn't have a responsibility for answering it, especially when it's a

national matter. The hon. member is simply providing opportunities for making announcements about things which are already public knowledge.

MR. PAPROSKI: On a point of order, Mr. Speaker. Yesterday the Minister of Manpower briefly, in one sentence, alluded to Canada Career Week. Today the hon. member of the opposition indicated in a very negative way his views of Canada Career Week. As far as I'm concerned, Mr. Speaker, I believe this Canada Career Week committee is doing an excellent job in this province. I've just been asking the minister to clarify that particular organization.

MR. SPEAKER: It really doesn't change the nature of the question or the nature of my objection.

Seizure Exemptions Legislation

MR. R. SPEAKER: Mr. Speaker, my question is to the Attorney General, the House leader. Many unemployed and financially struck people in this province are anxiously awaiting the passage of Bill 29. I am wondering if the minister could indicate whether that Bill will be passed in this fall session, as it has sat on the Order Paper for some time.

MR. CRAWFORD: Mr. Speaker, I don't think the premise of the question has very much to do with the content. I would just say with respect to Bill 29 that it's still in its place on the Order Paper. I have had some representations in the intervening months, as has the sponsor, the hon. Member for Barrhead. But no final conclusion as to the government's view has yet been reached.

MR. R. SPEAKER: Mr. Speaker, a supplementary question. Would the minister indicate whether a decision will be made this week as to whether or not the Bill will proceed to passage?

MR. CRAWFORD: Mr. Speaker, I hope the decision can be made by the day after tomorrow.

Compressed Natural Gas as Vehicle Fuel

MR. MUSGROVE: Mr. Speaker, my question is to the Minister of Energy and Natural Resources. Is the minister presently working on a policy to promote the use of compressed natural gas in vehicles?

MR. ZAOZIRNY: Mr. Speaker, I'm happy to respond. I would say at the outset of that response that the general policy of the government has been to ensure that consumers are the ultimate decision-makers in terms of fuel utilization in vehicles, whether that be gasoline, propane, or natural gas. In line with that general policy approach, we have put forth an information program to apprise the public about the advantages and qualities of particular fuels, whether they be propane, compressed natural gas, or gasoline.

In terms of particular initiatives, Mr. Speaker, I can advise the Assembly that in the September 1981 energy agreement with the federal government, the government of Alberta agreed to utilize the market development incentive plan in part for the development of compressed natural gas stations across the country. In combination with the federal initiative, that has resulted in a program where up to \$50,000 is available per public CNG fueling station, as well as a \$500 federal grant for vehicle conversion.

Mr. Speaker, I should also add that not too many months ago this Assembly passed a resolution on the specific subject of CNG utilization. Flowing from that resolution, in the white paper document there is a specific reference to modification of our existing policy. We'll be looking to those changes in the months ahead.

MR. MUSGROVE: One supplementary question, Mr. Speaker. Is the minister contemplating converting any vehicles that are owned and operated by the province?

MR. ZAOZIRNY: Yes, Mr. Speaker. That subject has in fact received some recent consideration, and I might invite my colleague the hon. Minister of Utilities and Telecommunications to respond more specifically.

MR. BOGLE: Mr. Speaker, if I might supplement my colleague's response, arrangements have been made for the conversion of 15 vehicles owned by Alberta Government Telephones and operated out of one of the yards in Calgary. It's my understanding that the arrangements will be completed within the next few weeks, and those vehicles will have been converted so that they can use compressed natural gas. There will then be a test period during which the telephone company, along with the supplier of natural gas, will monitor the program so that we can learn about its applicability to other parts of the province.

MR. PAPROSKI: A supplementary, Mr. Speaker. It is my understanding that Northwestern Utilities in Edmonton has been utilizing compressed natural gas in some of their vehicles. Can either minister indicate whether there has been communication with that company about their operation of those vehicles?

MR. ZAOZIRNY: Mr. Speaker, I can't say that I have had any personal conversations or communications with them. I could only say that we as a government department are encouraging increased utilization of the product. One of the other areas we're going to be looking at is research into utilization in farm vehicles, which I think has promise as well.

Lethbridge CPR Station

MR. GOGO: Mr. Speaker, I have a question to the hon. Minister of Culture, and it concerns the designation of an historic site in my constituency. The CPR station, which is one of the larger ones in the province, is sitting alone down there because they've moved the rail yards out of the city. There's a certain fear that that place may be destroyed. Could the minister advise this House, specifically me, of the status with regard to designating that an historic site?

MRS. LeMESSURIER: Yes, Mr. Speaker. In 1979 the Department of Culture began negotiations with the CPR on this very station, and I believe application was made on behalf of the city in 1981. Since 1982 we have been waiting for the CPR to turn over the title of that station to the city of Lethbridge and the province.

MR. GOGO: A supplementary, Mr. Speaker. I thought the city of Lethbridge and the province of Alberta took title to that and now own the CPR station. If that is true, could the minister advise me that she'll make a commitment to pursue the fact that it becomes an historic site as quickly as possible?

MRS. LeMESSURIER: Mr. Speaker, I can assure the hon. member that Alberta Culture is very interested in that station,

as it dates back to 1905 and is one of the best preserved CPR stations in Alberta.

Electric Energy Marketing

MR. HIEBERT: Mr. Speaker, my question is directed to the Minister of Utilities and Telecommunications and arises from second reading of Bill 78, the Electric Energy Marketing Amendment Act, 1984. Yesterday the minister indicated in the House that the city of Edmonton would benefit some \$9 million from its membership in the agency, yet it has been publicly reported that it would cost the city of Edmonton some money with regard to being a member of the agency, to the effect of \$9 million. Could the minister clarify what the issue is all about?

MR. SPEAKER: I recognize the seriousness of the question, but it seems to me to be eminently suited for debate on the Bill. Possibly it could be dealt with in committee or at third reading.

MR. HIEBERT: On a point of order, Mr. Speaker. Yesterday there was information given in the Assembly, yet there appears to be some confusion. Could the minister clarify?

MR. SPEAKER: It seems to me that the time to clarify confusion in debate is during debate.

Federal Throne Speech

MR. NELSON: Mr. Speaker, I'd like to direct a question to the Minister of Federal and Intergovernmental Affairs. I am wondering if the minister has had an opportunity to evaluate the impact on Alberta of the throne speech in the House of Commons yesterday, in particular the lack of comment relative to the very important oil and gas industry.

MR. HORSMAN: Mr. Speaker, the subject of energy and the Speech from the Throne yesterday have been a matter of some communication between me and people in Ottawa. I think members of this Assembly and Albertans should be reassured that the government of Canada has not proposed to neglect that very vital industry. In fact, as recently as this morning the Hon. Don Mazankowski indicated quite clearly that that will be the subject of discussion during the forthcoming financial statement by the Minister of Finance; plus considerable program development in that area will be announced within the coming weeks by the Minister of Energy, Mines and Resources.

The Speech from the Throne, as brought forward yesterday, is of course available to all Canadians to read and interpret. We shall have to await and see the actual legislative and other actions which will flow from the new session of the federal Parliament.

I have reviewed the speech, and I have also followed up on what I think is a concern expressed in the question by the Member for Calgary McCall.

Continuance Fees for Businesses

MR. SHRAKE: Mr. Speaker, I'd like to ask a question of our Minister of Consumer and Corporate Affairs. I am wondering if she could inform us if there has been a recent change in the policies regarding limited liability companies. Have they been assessed a \$200 fee? This would be for a lot of the small businesses that are hurting at this particular time.

MRS. OSTERMAN: Mr. Speaker, I can only assume that the hon. member is referring to the continuance fee with respect

to the provisions under the Business Corporations Act. Possibly members of the House will recall that when the Business Corporations Act was passed, a three-year period was given for companies in which to make a decision as to whether to continue or not. In the first year there was no charge for that continuance. In the second year there was a \$50 fee, and that was in place so that we would have companies continuing not all at one time but over a period of time. There are now a number of companies continuing in this third and last year. They are being charged the full \$200 fee.

MR. SHRAKE: A supplementary question. If they have any difficulty paying this in one payment, are there some arrangements whereby they could pay this over a period of time?

MRS. OSTERMAN: Mr. Speaker, we've made no such arrangement. I'm not sure what administrative complications there would be with respect to trying to phase in a \$200 fee. But if the hon. member has a particular company in mind and there were some way of our extending a special policy for them, I'd be happy to undertake a review.

MR. SHRAKE. Thank you.

ORDERS OF THE DAY

MR. MARTIN: Mr. Speaker, I would like to request unanimous assent of the Assembly for moving the following motion at this time. I'll read it, and you can make a ruling.

Be it resolved that all items of business standing on the Order Paper and on notice in Votes and Proceedings in the name of the late Member for Spirit River-Fairview, stand and retain their places on the Order Paper and on notice in Votes and Proceedings under the name of the Member for Edmonton Norwood.

HON. MEMBERS: Agreed.

MR. SPEAKER: The Assembly has obviously agreed to accept the motion without notice. Does the Assembly agree with the motion?

HON. MEMBERS: Agreed.

MR. SPEAKER: It is so ordered.

head: MOTIONS FOR RETURNS

MR. HORSMAN: Mr. Speaker, we propose to deal with two of the motions for returns in the name of the hon. Member for Little Bow on the Order Paper today but hesitate to do so in the absence of the mover unless the hon. Member for Clover Bar is prepared to deal with them today.

DR. BUCK: If they are called, Mr. Speaker, I'd be glad to.

MR. HORSMAN: Then we move that just Motion for a Return 183 stand and retain its place on the Order Paper.

[Motion carried]

182. On behalf of Mr. R. Speaker, Dr. Buck moved that an order of the Assembly do issue for a return showing details of all

expenditures of public funds for the 15 government and school officials who travelled to Japan and South Korea in May 1984, showing for the trip:

- (1) the itinerary and date of departure and return;
- (2) total cost in each category of transportation, meals, accommodation, and entertainment;
- (3) the names of the government officials who went on this trip;
- (4) the written reports by the deputy minister and the group's findings of the Japanese and Korean school systems.

MR. HORSMAN: It was my understanding that the hon. Minister of Education would be dealing with that matter. Since he is not here to do so, perhaps the hon. member would be kind enough to allow that matter to stand until Thursday of this week.

DR. BUCK: Mr. Speaker, on behalf of my colleague I will withdraw Motion No. 182 and hold it until Thursday next.

[Motion withdrawn]

184. On behalf of Mr. R. Speaker, Dr. Buck moved that an order of the Assembly do issue for a return showing, for the special promotions undertaken under the "Canadian umbrella" in Washington, New York, Chicago, Dallas, Cleveland, Pittsburg, and London, England, as reported in the Department of Tourism and Small Business annual report for the year ended March 31, 1983, page 14:

- (a) the nature of the special promotions,
- (b) the type of response received,
- (c) the costs of the special promotions.

[Motion carried]

head: MOTIONS OTHER THAN GOVERNMENT MOTIONS

210. Moved by Mrs. Koper:

Be it resolved that the Assembly consider the desirability of legislation in Alberta to provide for the mandatory use of child restraint devices in motor vehicles for children from birth to five years of age.

[Adjourned debate May 1: Mr. Pahl]

MRS. KOPER: Mr. Speaker, on a point of order. Since this motion was first proposed to the Legislature early this spring, the Minister of Transportation has introduced Bill No. 83, the Child Transportation Safety Act, and it has passed second reading. That Bill carries out the intent of this motion. Because the government has responded in this way to the issue of the safety of children being transported in motor vehicles, I hereby beg leave to withdraw Motion No. 210 in my name on the Order Paper.

MR. SPEAKER: Under the circumstances, I believe withdrawal of the motion might require unanimous consent. Does the Assembly agree that the motion be withdrawn?

HON. MEMBERS: Agreed.

MR. SPEAKER: It is so ordered.

211. Moved by Mr. Cook:

Be it resolved that the Legislative Assembly encourage the government to commit long-term funds to create a biotechnology centre of excellence in Alberta and thereby enhance Alberta's agricultural industry.

[Adjourned debate May 3: Mr. Woo]

MR. WOO: Mr. Speaker, I last had an opportunity to address this motion during the course of the spring sittings. At that time, following a number of other speakers, I spent some time talking about the international perspective of biotechnology, its advancements, achievements, and future prospects. I also spent some time and detail speaking on our land base because of the agricultural orientation of my hon. colleague's motion. I concluded those portions of my remarks with the statement that many of our agriculture-related problems could be resolved through the advancement of biotechnology and its successes in this province. It would certainly be a case of enhancing two related industries and strengths of Alberta: agriculture and ranching.

In continuing debate on this motion, Mr. Speaker, I want to digress for a moment and pick up on some of the statements made by my colleagues from Edmonton Glengarry, Calgary McKnight, and Cardston. Their statements reflect the reality that biotechnology is not simply a freestanding discipline in itself. That is something many of us have a tendency to overlook. In fact biotechnology has a number of scientific and technological elements which, in combination, direct themselves toward certain specific goals which are related to or based upon agriculture for purposes of this particular debate.

It may be of interest to hon. members to hear some of the more recent definitions of biotechnology, as put forward by a number of countries which are deeply involved in this relatively new science. My source for these definitions is a report to the Organization for Economic Co-operation and Development, which was set up under a convention signed in Paris on December 14, 1960. Canada is a member of that organization. The report is titled *Biotechnology: International Trends and Perspectives*.

I have taken the liberty to transcribe some of the definitions and put them down in such a fashion that they might be of benefit to members of the Assembly for a better understanding and appreciation of what biotechnology is about and what it involves. From the Federal Republic of West Germany comes this definition:

Biotechnology is concerned with the use of biological activities in the context of technical processes and industrial production. It involves the application of microbiology and biochemistry in conjunction with technical chemistry and process engineering.

That is a fairly recent definition.

The United Kingdom and Canada have also come forward with their respective definitions:

the application of biological organisms, systems, or processes to manufacturing and service industries.

Canada later added:

the utilization of a biological process, be it microbial, plant, or animal cells, or their constituents, to provide goods and services.

From a study from the Netherlands, *Biotechnology: A Dutch Perspective*:

The science of applied biological processes. The science of the production processes based on the action of microorganisms and their active components, and of production processes involving the use of cells and tissues from higher

organisms. Medical technology, agriculture, and traditional crop breeding are not generally regarded as biotechnology.

A number of institutes of biotechnology, pure and applied chemistry, and science and technology offer two other definitions which assist in understanding what biotechnology is about. Firstly,

the integrated use of biochemistry, microbiology, and engineering sciences, in order to achieve technological industrial application of the capabilities of microorganisms, cultured tissue cells, and parts thereof;

and lastly,

the application of biochemistry, biology, microbiology, and chemical engineering to industrial processes and products, including here the products in health care, energy and agriculture, and the environment.

Mr. Speaker, at this point I think it is necessary to recognize the importance of four major sciences upon which biotechnology is dependent. They are microbiology, biochemistry, genetics, and engineering. I believe it is evident that if we are to support biotechnology as an important factor towards the enhancement of the agricultural and livestock industries in this province, it goes without saying that we must equally support the ongoing development of these four basic sciences in our universities and research centres.

Mr. Speaker, research into biotechnology in agriculture is being undertaken in a very intensive way in a number of countries. The best example can be found in the Organization for Economic Co-operation and Development, which comprises 24 member nations. Of these, the most active countries in the field of biotechnology are the United Kingdom, the United States, the Federal Republic of Germany, Japan, France, Australia, the Netherlands, certainly Canada, and also a new nonmember country, the People's Republic of China.

Our neighbours to the south, the United States, have quite clearly recognized the important role of biotechnological science in agriculture. A United States market research firm has projected that by 1995 biotech-developed products will constitute 26.6 percent of the United States' \$70 billion health care products market and 21.5 percent of the \$470 billion agricultural products market. Based upon these projections, the United States government is currently spending between \$200 million and \$500 million a year, all of which is being directed towards biotech research and development of goods and services. What this will lead to is a much superior advantage for U.S. agricultural products and agriculture-based goods and services on a competitive basis on the international market. I believe that if we as an agricultural exporting nation and province are to maintain a competitive position in international markets, we must make some very definitive and long-term commitments to the advancement of agricultural biotechnology, by way of both policy and funding.

As I mentioned earlier, Mr. Speaker, research into agricultural biotechnology is being pursued in a number of countries in order to produce plants with better disease resistance or nitrogen-fixation capabilities; to produce cheaper and environmentally safe herbicides, pesticides, and fertilizers; and to increase meat and milk production from livestock. In cases such as this, and in many other areas of biotechnology, Alberta has made some very significant gains. We are certainly fortunate to have the expert and professional people of the scientific community within our research centres, universities, the Alberta Research Council, agricultural colleges, and experimental stations. These are the expert professionals who undertake biotechnological research and development on behalf of the agricultural and livestock industries of this province.

Mr. Speaker, advancements made in Alberta are given international meaning when taken in the context of our sister relationship with two provinces in the Pacific Rim community: the prefecture of Hokkaido in Japan and the province of Heilongjiang in the People's Republic of China. Both these provinces in the Orient have established northern areas research centres with strong biotechnology components. In this and other agriculture-related areas, Alberta and the governments of our sister provinces are working toward the strengthening of relationships in the spirit of scientific and economic co-operation.

Because of high-profile institutions such as the Alberta Research Council and the Alberta heritage medical research centre, we have a tendency to neglect or to recognize the various departments of government that are playing a very important role in matters which we debate in this Assembly — for example, our Department of Agriculture, particularly the role its people play with respect to our activities in the area of international agricultural science exchange and technical co-operation. Dr. Art Olson, the assistant deputy minister who heads Alberta Agriculture's research and resource development division, and Dr. Mahone, the director of the agricultural research division, are two gentlemen with distinguished records in agriculture. These two senior officials have visited the People's Republic of China and Heilongjiang province to effect co-operative discussions and to co-ordinate research efforts which will provide mutual benefits to both provinces in both countries. Quite naturally, because of existing similarities, there is a special emphasis on cold-climate agricultural interests. In return, Alberta has received a number of China's delegations and certainly a number of scientific delegations from Harbin, all of which were to further our discussions and tour our research and scientific facilities.

I might also mention, Mr. Speaker, that Mr. Barry Mehr, the assistant deputy minister in charge of the marketing division of Alberta Agriculture, has made a number of visits to China with regard to genetic engineering in the areas of artificial insemination and embryo transplants, in an effort to assist in the improvement of cattle herds in northern China.

Mr. Speaker, I believe these examples of Alberta's international activities in the area of biotechnology are indeed important. I believe that such activities really reflect the integrity and scientific capacities and capabilities of our various research centres and the expert people who staff them, both in government and in the private sector.

There is no question that biotechnology is a rapidly growing and highly competitive area with great potential benefits. But it is also a frontier area. I understand some experts predict that 90 percent of biotech techniques, goods, and services have yet to be developed or refined to a point where practical agricultural applications can be effected. I suppose the bottom line to all of this is long-term financing. If we are not to be left behind, if we are to be able to put our agricultural products on the international market on a competitive basis, I see a need to establish, from both national and provincial points of view, a well co-ordinated and adequately funded program for biotechnological development on a long-term basis.

Mr. Speaker, I certainly support and recommend this motion to the Assembly.

MR. STILES: Mr. Speaker, I am pleased to rise today to congratulate the Member for Edmonton Glengarry for having put this motion before the Assembly and to speak in support of it.

I'm a little reluctant to stand up and begin speaking about this subject, the specific details of which I know very little. It's a very sophisticated, technical subject, and not one I'm

particularly familiar with in terms of actual specifics. However, I'm certainly aware of the tremendous advances that have been made in this field in the very recent past and the huge potential for the future of the agricultural community.

In looking into the subject further, in the general area of research in our province and particularly in the agricultural field, I find that Alberta has made a significant contribution to farm research. I'm looking at a newspaper article in which the figures are put forward that Alberta spent \$17.8 million in 1982-83. It's suggested in this article that Alberta is second to Ontario in spending in this area, in the sense that Ontario spent something in the order of \$29 million on agricultural research programs. However, if one calculates the population difference, you find Alberta probably spent in the area of \$7.75 per capita on agricultural research, whereas the province of Ontario, the one claimed to be the higher spender in this field, spent only \$3.85 per capita. That's quite a difference — 2 to 1. From the same article, I should point out in addition that the spending for Canada is quoted at \$177 million. In fact that works out to about \$7 per capita, so on a per capita basis Alberta is also a bigger spender in the area of agricultural research than our federal government.

I think that's encouraging, Mr. Speaker. Certainly those of us who live in agricultural communities and are familiar with agriculture are very much aware of the efforts made in this area by the Farming for the Future program. I think it would be unfair if I didn't mention Farming for the Future and some of the statistics of that organization. It was begun in 1978 with an initial investment of \$10 million by this government. By this year it had expended another \$25 million, and the program has been extended until 1987 with a further commitment of approximately \$15 million. The expectation for 1984 is somewhere in the area of 500 applications.

Incidentally, it's interesting to note in passing the spending in that area which has gone to Agriculture Canada. Alberta's Farming for the Future program has put \$7 million into Agriculture Canada projects to enhance the federal government's commitment to speed up the work on those projects of special interest to Alberta, such as canola, bee culture, and forage crops. Another \$7.6 million has gone to the University of Alberta, where we have a competent agriculture faculty. I should mention that they have made a significant contribution to the Farming for the Future program.

Looking through some other publications in this regard, I couldn't help but notice the Agriculture department's *Agri-News*. Going through it just in the last few months, we were able to identify 15 to 20 articles which have dealt with the biotechnology area — new discoveries and suggestions arising from biotechnological research. So we are certainly into the era of developing biotechnology and applying it in our agricultural community.

Biotechnology is a specific area of biology. I think most of us — those of us who are not chemists or biologists — probably think of it more in the field of genetic engineering than anywhere else, certainly in relation to its application to our agricultural industry. Of course it includes a lot more than that. The areas of cell fusion and enzyme development, enzyme processes, and plant cell and tissue cultures are all included. As I said earlier, one of my weak spots in schooling was chemistry, and I don't dare get into the discussion of the specifics of biotechnology.

But why should we have a biotechnological centre in Alberta? The question was addressed in part by my colleague for the constituency of Edmonton Glengarry, but I think I should reinforce some of what he had to say. Agriculture is one of the two key industries in this province. Certainly it

involves a tremendous number of our residents in Alberta, both the primary producers on the farm and that tremendous infrastructure we have developed in support of our agricultural community. We recognize that at the moment we certainly have more severe unemployment than we have experienced in recent years in our province. I should point out the multiplier effect of agriculture in that area. I'm not going to get into quoting from where the figures have come, but it is generally accepted by the academic community in this field that for every dollar of primary production, the spin-off effect is approximately 7 to 1 — \$7 in the infrastructure for every dollar of primary production.

The effect on unemployment in that area, Mr. Speaker, is even more significant. There are those who will say that it is higher, but the minimum effect is 12 people employed in the infrastructure for every individual engaged in primary production. So in every instance that we enhance the primary production sector of our agricultural industry, we can create 12 jobs in the infrastructure. I think that's significant.

In addition to that, in the recent past we have begun to see the development of a number of opportunities in the export area, not so much in terms of production and commodities but of technology. In the area of livestock exports, we now find we're receiving demands or requests for purebred livestock stock, in the Pacific Rim countries in particular. For example, I'm aware of a recent request from China for purebred swine, which is going to have a substantial impact on the purebred swine breeders of our province. In addition there is interest in our cattle, and that should be followed up by our purebred industry. Alberta happens to have a very well developed purebred livestock sector, and that kind of development can be nothing but good news for them.

The whole area of genetic engineering is fascinating for the livestock breeder, the purebred breeder in particular. We've now recognized the advantages of crossbreeding, and they have been put forward and debated in the industry. Of course the purebred breeder has a significant role there, because you must have the foundation purebred stock to start from in any crossbreeding program. Today we have the development in biotechnology of cloning and genetic controls, the possibility of producing identical animals having characteristics suitable to particular climates and regions. The capability of producing animals that have a potential for producing twins, for example, is going to have a significant impact on our livestock industry in the province. Also, the export of that kind of technology will enhance our agricultural sector even further.

Without the centre proposed by the hon. Member for Edmonton Glengarry, I don't believe we will have the direction or development our agricultural industry in Alberta needs. I'm told the centre of biotechnological development at the present time is at Guelph. If Alberta doesn't take some significant steps in this direction in the fairly immediate future, that development is likely to stay at Guelph. The development of a centre as proposed by this motion will tend to provide the impetus and encouragement for the further development of these biotechnological techniques in Alberta and certainly encourage the agricultural industry to be more innovative and exploratory in their efforts.

We have the well-established faculty of agriculture at the University of Alberta. We also have the flagship agricultural school for western Canada located at Olds College, where the transfer of the technology we develop at such a centre can take place in the field. That transfer of technology can be conducted over a period of time to the students studying agriculture for the purpose of going into the business, as opposed to the research scientists.

Mr. Speaker, I'm suggesting that a centre such as is proposed in this motion will enhance, further develop, and encourage our agricultural industry. As the hon. Member for Edmonton Sherwood Park pointed out, probably 90 percent or better of the work in this area has yet to be done. We are at the beginning. The white paper on industrial and science strategy for the 1985-1990 period recently put forward by our government points out that there should continue to be a focus on the applied needs of the agricultural industry and that the newer technologies of biotechnology, in conjunction with computer-based systems development and genetic engineering techniques, should be incorporated into research programs. That's the position of this government. I believe the development of a centre such as is proposed in this motion would be a first step in achieving that objective.

MR. PENGELLY: Mr. Speaker, as a caucus member of the Alberta Agricultural Research Council, I rise this afternoon to comment on the merits of Motion 211, as well as to commend the Member for Edmonton Glengarry for providing the Assembly with the opportunity to discuss the potential of biotechnology in agriculture.

Mr. Speaker, I believe the future of agriculture depends on the amount, quality, and direction of the research applied to it. The success of few other industries is so closely linked to the success of its research development. By several measures, in a huge industry and under favourable domestic and international conditions, agriculture has vast potential. Its indirect impact is registered throughout all sectors of the economy. Since household incomes in rural Alberta are so tightly linked to the success of agricultural production, it seems rather obvious that any improvements to agriculture dramatically improve the whole economy.

Mr. Speaker, I'd like to address the biotechnology issue by talking about some of the research already taking place in Alberta. The Alberta Heritage Savings Trust Fund made over \$7 million available to the Farming for the Future project in 1983-84. The program was developed in 1977 to improve the net farm income and long-term viability of Alberta's vital agricultural sector. Over 150 individual research projects were conducted last year, ranging from development of high-yielding crops to farm management. Farming for the Future's mandate is to support the advancement of agricultural technology carried out by universities, private industry, and agencies of the provincial and federal governments.

Mr. Speaker, I wish to review some of the biotechnological advances that have been made under this most worthwhile program. One of the main objectives of Farming for the Future is to breed higher yielding and more disease-resistant varieties of cereals and oilseeds. One such project has resulted in the licensing of a new high-yielding, early-maturing variety of barley designed for the Peace River region. In general, however, plant-breeding projects require much time and energy in order to produce crop varieties with desirable characteristics.

Alfalfa plants are able to convert atmospheric nitrogen into a form which helps a type of soil bacteria called rhizobia, which in turn boosts the ability of alfalfa to fix nitrogen in the soil. Through the Farming for the Future program, scientists have determined a better method of screening this for use in inoculants, found two strains of bacteria suited to soils in northern Alberta, and developed a better method of applying inoculants.

Preliminary results of a long-term project have indicated that high-moisture silage can be cut and stored without danger of spoilage when sulphur dioxide is applied as a preservative. Current research includes studies on methods of conserving soil

nutrients, optimizing production of gray-wooded soils, and crop utilization of nitrogen in soils.

Besides these mainstream agricultural research projects, Farming for the Future provided financial assistance to an investigation which established the significance of root disease in peas and beans. An integrated control program involving fungicides, crop management, and sanitation was developed to overcome gray mold on cucumbers.

Mr. Speaker, there is no doubt that immeasurable research has been conducted in the area of biotechnology through the Farming for the Future program, yet there is potential for even greater advancement. For example, as prices of fossil fuels increase, so does the cost of fertilizers and the petroleum to transport those fertilizers from the point of manufacture to the point of use. Biotechnology holds the key to reducing or totally eliminating the need to apply some fertilizers to agricultural crops. Biotechnology has the potential to create a second green revolution in agriculture, because optimal yields will be obtained by applying bacteria instead of fertilizers in the seed furrow at a fraction of the cost of fertilizer.

In the agricultural sector, Alberta already has a basic foundation in biotechnology, particularly through the Farming for the Future program. It is fortunate to have outstanding facilities in such places as Olds, Fairview, Lakeland, and Edmonton. There is a corps of recognized workers in biochemistry, microbiology, and plant physiology. It is also interesting to note that three Alberta teams were recently awarded major grants for work in biotechnology.

Mr. Speaker, I believe any additional support we in the Legislature can give to the field of biotechnology would benefit the constituents of Alberta. Therefore I support passage of this motion, and I urge all other members to do the same.

MR. CLARK: Mr. Speaker, it's a pleasure for me to speak today on Motion 211. I congratulate the Member for Edmonton Glengarry for bringing it forward.

I don't believe that Canadians and Albertans have ever found it so necessary to compete in world markets. The only way they're going to do that is with research and development into agritechnology and biotechnology. I've listened to the other speakers, and they have gone over the subject very well. I would just like to say that we in Alberta, with 2 million in population, have done very well in developing our high technology and industrial development. We have led the way in heavy oil technology, tar sands development, and tertiary oil recovery. We really haven't done that badly in agriculture either. If you look at Canada, we certainly produce our share of the food for the population we have. Of course we have borrowed some of our technology from our good neighbours to the south. We have also developed a lot of it here with Farming for the Future and our Alberta Research Council, which was put forward so well by the MLA from Sherwood Park. I won't go into that, because it has already been said.

I would like to concentrate a little bit on the importance of this type of research and what research has done before for agriculture. If you look back a few years, it wasn't called biotechnology in those days. If you look back to 1914, when my dad came to farm in this country, it was said that you couldn't grow wheat north of the Canadian border because it just wasn't successful. But with one man's ability to make a new wheat from Red Fife and a few other varieties, we came up with the Marquis variety of wheat that allowed us to produce wheat much farther north. After Marquis — of course they did it by picking strains and by manipulation of the seed — we've come up with a lot of varieties of grain. I'll always remember that 222 was one the government outlawed on us. It was a very

successful wheat. Another was Canus wheat; it was a bearded wheat. I grew that one year and it never did get ripe.

AN HON. MEMBER: You must be pretty old. That was a long time ago.

MR. CLARK: That's the beauty of it, you see. You can always go back, look at the mistakes you've made, and see if you can do something about them.

With the northern advance of wheat, we now have many varieties, and we can grow it quite successfully clear up into the Peace River district. The research in those days was done by selecting the strains. They were taken down to Mexico, where they could grow two or three crops in one year. That's one of the ways they developed them in those years.

My dad came from Iowa, and he used to say that was the corn centre of the U.S.A. He said: someday I'm going to take you back there, and I'm going to show you the old mill farm and where they really grow corn. We did have occasion to go back in about 1954. To our surprise the land there was selling for \$450 an acre. In our country at that time, before the land speculators got into our land, it was selling at its usual price of \$25 to \$30. I wondered how they could pay for it. Just to show you the importance of development in agriculture, our friend there told us it was simply the hybrid seed they had developed, which raised the productivity of an acre of corn from about 40 bushels an acre maximum to 100 or 120. That was a development through the manipulation of plants and seeds. It brought a great deal of wealth to the agricultural industry in the United States, and it's still going on. I don't believe I've heard yet that we've developed any hybrid wheat at this time. But if we ever could, it would be a real godsend to the wheat growers.

As one of the other members suggested, in the future we will look at the cloning of animals, trees, and plants.

AN HON. MEMBER: And then members.

MR. CLARK: Heaven forbid. We're one of a kind here; they couldn't clone us.

That's the exact duplication of animals or plants. They have done it with sheep in Britain. They've also done it with trees in B.C. If you can get certain types of characteristics you like to see in a tree, and it matures 10 or 20 years earlier than natural trees, you really have something that is desirable for that industry. The same with the livestock industry — in fact they say that through genetic engineering of livestock by preselection of sex and the high incidence of twins, the benefit in the United States will be \$50 million to \$100 million within the next five to 10 years.

I guess one of the other members said what other countries are doing. I'll just run over it briefly. In Germany they spend \$100 million on biotechnology. In the U.S. they are spending \$91.5 million through the health research centre, and the National Science Foundation spends another \$15 million on biotechnology. As usual, the United States is in first place in this technology. But from what I understand, France has a real push on. They are going to spend \$28 billion in the next five years, and they believe they will be able to gain control of 10 percent of the world market.

If you are looking for benefits to agriculture, forestry, or the pulp and paper industry, I guess you have to look at what it will produce. If you find a product that will give you double the production, or you'll be able to harvest it 10 years earlier in the case of a forest, then these are some of the benefits that we could have from this area.

One of the other benefits has been developed in chemicals and weed sprays. The first chemical was developed during the war, and it was called 2,4-D. It was developed to take the leaves off the jungle so the Americans could see what they were shooting at. But it ended up being very beneficial to the farming community. I had occasion to start using the chemical in 1948, the first time it hit our town. I bought a sprayer and started doing some custom work. It worked very well on the wheat. But when we did about 100 acres of flax for a neighbour, we went out the next day and it was lying flat on the ground.

AN HON. MEMBER: The neighbour or the crop?

MR. CLARK: The crop was lying flat on the ground. He said, that's it. He thought I'd killed his crop. I wasn't too sure I hadn't. It was the first year it had ever been used. Anyway, by the time fall came around, he was wishing that we had done the whole crop. Everybody knows now that flax wilts a little, but we didn't know that then.

It's been one of the biggest technological advances for agriculture I have seen. In my estimation, if you take that and add the many other sprays they've come out with — the selected sprays that will pick wild oats out of your crop, take the quack grass, and do many things — those and the development of seeds have been the biggest benefits of technology to farming.

In conclusion, Mr. Speaker, I'd like to say that if we are to ensure that Alberta and Canada stay in the food production race, we have to come to grips with technology, not just biotechnology but all the technology in the farming industry. I wonder whether we should leave all this research to the universities or to Alberta Research. They're doing good work. Many of our developments have developed out of the universities. Alberta Research, and Farming for the Future. They're all doing good work, but there are still areas in technology that are being developed by private industry in our area, in some small factories and even some of the farms, that never seem to get off the ground.

Besides supporting experimentation and technology in universities and all the other areas, I think it's time that we started saying to people that research and development is not a sure thing. If somebody has a good idea, I think we should help him develop it with the facilities and technical knowledge we have behind us. In that way, private enterprise can also get in on the act. If we can use our facilities in co-operation with private enterprise to help them develop some ideas they have, I believe it would be an excellent way of going about it.

That's about all I have to say. I would again like to compliment the member for bringing the motion forward. I urge members to support the motion.

Thank you very much.

MR. FISCHER: I'd like to rise in support of Motion 211, proposed by the hon. Member for Edmonton Glengarry.

The agriculture industry is the anchor of our Alberta economy. If we want it to stay that way, we need to remain competitive in this highly competitive world market upon which we are so dependent. We need to take advantage of every new idea we can get our hands on in biotechnology. It is important that we keep up with or go ahead of the rest of the world in the quality and quantity of our crops and livestock production. That means keeping up with new ideas and using those ideas to boost our production.

There are many ways biotechnology can do this. Biotechnology means using living organisms or parts of them to make new products or to modify existing ones to develop new varieties of plants and animals. These ideas are very important to

our agriculture industry. Biotechnology research can produce new varieties of crops which are more suited to our climate, soil, and weed conditions. It can develop disease- and pest-resistant varieties or crops with nitrogen-fixing capabilities. The Member for Innisfail made mention of the great possibilities of crops with nitrogen-fixing capabilities. With the high price of nitrogen fertilizers today and the amount that is used, I think you can appreciate just how valuable this kind of research is. If we could produce grains with nitrogen-fixing abilities, it could save the farming industry in Alberta an estimated \$200 million to \$300 million a year.

Biotechnology also has applications in soil reclamation and in making marginal lands suitable for agriculture. In the livestock line of things, genetic engineering, which is one branch of biotechnology, can produce bigger, hardier, and healthier animals. Research in biotechnology has also looked at developing new medicines and vaccines for livestock.

If we encourage the development of biotechnology in Alberta, it means the research being done will be related to our local concerns. It is not good enough to wait for the other countries to come up with new ideas for increasing our productivity. We have to stay competitive, and the way to do that is to have the research done in Alberta so it will be focussed on our specific problems.

It is not enough either to encourage research in a haphazard, short-term way. Long-term funding for biotechnology is necessary to attract creative people to the field, to make sure that good research people stay in Alberta, and to draw specialists from other places to this province. Research is already going on in the fields related to biotechnology — like biochemistry, genetics, and so on — but we can help those people co-ordinate their efforts by taking some initiatives in this area. We can help make sure that expensive research is not being duplicated, and it is important to provide research people with an incentive to focus their work on the practical problems that face Albertans.

Mr. Speaker, it is true that this motion states that making Alberta a biotechnology centre of excellence will enhance agriculture in Alberta. But we should keep in mind that there are many applications of biotechnology — in forestry, mining, medicine, and the environment. For these reasons, I am in favour of this motion, and I encourage all the members to support it.

MR. NELSON: Mr. Speaker, it gives me a great deal of pleasure to stand in my place to discuss this motion put forward very ably by the Member for Edmonton Glengarry.

I can't say I'm particularly an expert in the area of biotechnology. It's unfortunate that you're not an expert on many things that happen here, but you certainly make every effort to participate . . .

MR. WOO: And sound like one.

MR. NELSON: Yes, maybe even sound like one.

Mr. Speaker, over the last number of weeks and months, people in my constituency have discussed agriculture to some length. I guess we all need to be concerned and to consider agriculture in our environment in Alberta. It is, as one member said — and maybe I'll just help him out a bit — a half of the hook of the anchor, the other half being the oil and gas industry.

The future of agriculture depends on the amount, quality, and direction of research applied to it. The success of few other endeavours in our society is so closely linked to research and technology transfer. Mr. Speaker, as a result of this very close linkage, I suggest it is critical that farmers, agribusiness, and researchers have a very close and profitable working relation-

ship. It's unfortunate that especially in times of difficulty we tend to pull apart a little bit rather than pull together. During times of high activity, we may pull apart even further.

As we all know, Alberta is a landlocked community, and we need to consider further development of our resources by processing. To do that, we need the technology development to ensure that the future of our province is put in the forefront. It's very easy to examine what's going on around the world — the United States and particularly France, where it is estimated they're going to spend some \$28 billion on biotechnology research. That is a tremendous amount of money, and they feel that that kind of input will give them some 10 percent of the world biotechnology market by 1990 — 10 percent in one small jurisdiction.

Mr. Speaker, in the main in Alberta I guess we talk about the growth of our cereal grains. One difficulty in the future will be the deterioration of soil on our land. How long can we add nitrogen to the land? It's suggested that some years ago, when we started adding nitrogen, it increased production by two-plus bushels per acre in any given year. I believe that production now may be as low as half a bushel of additional production over the base in 1971. Therefore our land base, our soil, is deteriorating to such an extent that we cannot continue to grow the seed that is available today. We need to continue to reinvest money and technology in our agri-programs to ensure that our agricultural industry is viable and profitable in the future, not only for the farming community but also for those who develop the equipment and other materials related to that community.

In consideration of developing a biotechnology industry, it may mean that we as a Legislature have to examine the area of another endowment fund, similar to that which we've set aside for medical research, for technology in science and engineering. That is also being recommended to this Legislature by the Heritage Savings Trust Fund.

It's very easy to stand and talk all the time about what everybody else in the world is doing. Rather than playing a catch-up role in the development of the major technology we need, maybe we should again take a leadership role. We've taken leadership roles in many areas: medical science research and of course research through Farming for the Future. Although it's a great start, it certainly needs to be expanded, probably with more dollars and more research facilities.

The white paper recently distributed by the provincial government certainly recognizes research in our agricultural industry. It says that

future research should continue to focus on the applied needs of the agricultural industries

which is a very bold statement. Making a bold statement is relatively easy, but it's a matter of follow-up to ensure that we do in fact develop and recognize needs for these industries.

It goes on:

As the newer technologies of genetic engineering (biotechnology) and computer based systems mature, they are being incorporated into research programs. Specific priorities related to maintaining and expanding soil and water conservation resources, to crop and livestock production and to agricultural processing are recognized. The establishment of the Food Processing Development Centre at Leduc is an example and will assist the private sector to expand its processing opportunities in Alberta.

[Mr. Purdy in the Chair]

Mr. Speaker, this is only a start. We must make a commitment to expand the technology in the development of our

agricultural industry, both in the growth of grains and livestock and in the growth of our natural environment, such as trees and so on. I guess I can relate to Pine Ridge nurseries as being a tremendous start in the area of trying to develop biotech in research for replanting our forests. Tremendous achievements are being recognized and developed at Pine Ridge. I think all members, including the public, should have every opportunity to make a visit to this facility. It is an outstanding effort. In my opinion it is money *spent* in the best possible manner for the future of all Albertans, at least those who are interested in our environment, water resources, and of course the development of future forests for us to view and also to use for lumber, domestically or internationally.

Mr. Speaker, there are many interesting aspects to the application of biotechnology, and we should all examine this issue in a most enthusiastic manner. New technology can respond to a number of society's needs. These can include efficient food production. When we talk about efficiency in food production, I think Alberta right now can look high to the sky; we are probably one of the best in the world, especially in efficiency.

We need to examine the area of waste conversion. We do some detoxification of human and animal wastes, but at the present time this can interrupt our environment — our rivers and what have you. I think we should expend dollars in ensuring that the environment is examined and looked after when we talk about waste conversion.

Pollution control is another area we must examine to ensure that our environment is looked after. Technology can respond to human and animal disease diagnosis and treatment, and resource conservation or recovery. Further, biotechnology applied to industry could provide renewable feedstocks. It could provide new products. We can provide a whole new industry that can assist in enhanced manufacturing processing. It can assist in management of biodegradable waste, decreasing energy consumption.

Mr. Speaker, there are dozens and dozens of areas that can be examined in biotechnological research. As has already been indicated, to do these sorts of things of course costs money. Also, a government must make a true commitment. In Canada the development of biotechnology is probably in extreme disorder. It's very disorganized, and it is short of money. Maybe by placing a motion of this nature before the House, the Member for Edmonton Glengarry has placed before us a little twig to say: hey, guys and gals, we're ready to go; let's jump in and become a leader.

What's the first step? Let's examine our universities. Let's examine their priorities. Can we in fact develop students and encourage them to enter the field of biotechnological research? Yes we can. We can offer this opportunity by a commitment to the university or to an outside research council. I know that when I use the term "research council" — certainly there are activities going on within the present Research Council, but it may mean that because of the wide range of activities in this particular area, we could expand into other areas, with the universities being a starting or focal point, whilst our young people are being educated in the field of biotechnology.

I guess we can also look at some of the successes of biotechnology in Alberta. I don't know how many members are familiar with the research that has gone on in the development of a special bee for wintering in Alberta. That is what I would call one of the most magnificent, tremendous developments of our time, particularly if you're in the beekeeping industry in Alberta. But it took a lot of years, a lot of dollars, and a lot of time to develop this special process.

Mr. Speaker, when I stand here and discuss some of these issues, I often consider: what is the spin-off to the community

at large? The government may invest moneys to assist in the development of various commodities or products, buy research. Is that investment a cost, or is it strictly an investment we are to have a return on? Of course being in the business community, I like to think that when we invest in something we should get a return on the bottom line for that particular investment. In biotechnology, or any other technology for that matter, there is. If we keep our finger on the pulse, we are going to have industry develop around proven technology. That industry development is going to enhance our economy, which of course creates jobs and allows us to diversify to the extent where new industry being made available and also developing is an encouragement to not only our existing residents but our future young people who will be in the workplace. That goes back to encouraging our universities to develop and giving direction through policies of the government so that they may continue to educate our people in those areas that are going to be good for the future of Alberta.

Mr. Speaker, the discussion on this biotechnology could go on for hours and hours, because it has so many far-reaching aspects to our community and the future that we must develop for all Albertans. There are one or two things I'd like to say in conclusion. First of all, we should not downplay the fact that we have biotechnology activity in Alberta. As I mentioned, we have some in Farming for the Future, and there is a considerable amount of money being put into that area. We have the Alberta Research Council, which is developing many activities rather well. Through the federal government, we have the Beaverlodge research station and the Lethbridge Research Station. As I mentioned, we have another area, and that is the Pine Ridge nurseries northeast of Edmonton. We should not discourage but should enhance those programs. But let's not forget that we are at least doing some things out there.

Mr. Speaker, in the area of business and industrial development, the application of biotechnology, and more particularly the genetic engineering technology, will stimulate the development of new companies and also affect existing and established industries. Some of the examples that we could expand on as far as new companies are concerned include molecular biology companies. These could develop new strains of organisms, they could modify and enhance existing organisms, and they could also bank and transport organisms. Computer specialty companies can also provide interesting engineering processes; new fermentative process engineering companies involved with the construction of batch or continuous fermentative processes that are automated and computerized.

The far-reaching aspect of developing biotechnology within Alberta is great. The number of new industries and available activities that we can develop from the existing feedstock we have needs leadership from the government to ensure the future and prosperity of Albertans in a diversified, strong economy. To do that, we should all make every effort to support the intent of this motion, because it is given in sincerity by the Member for Edmonton Glengarry. I urge that support so we can enhance the development of Alberta and young Albertans through their education process.

Thank you, Mr. Speaker.

MR. ZIP: Mr. Speaker, I too am pleased to rise to speak briefly in support of this motion, which was very well thought out by the Member for Edmonton Glengarry. Other hon members have spoken about the excellent opportunities that are raised in the fields of agriculture and forestry by the creation of a biotechnology centre for Alberta. Other members have dealt with the possibilities such a centre would have in food processing and other manufacturing, and also the possibilities such

a centre would raise for environmental improvement and protection. Such a centre also raises very important possibilities and implications in the fields of medicine and pharmaceuticals.

One thing I would like to emphasize is the opportunity such a centre would create and provide for students in biochemistry and in other sciences. Biochemistry particularly is a very rigorous field with an almost unlimited list of subjects, offering possible, practical benefits to society. One of the problems students in this field face is employment upon graduation. A biotechnology centre in Alberta would provide an opportunity in this field in their home province, without their having to leave for elsewhere, and would also encourage students from other areas to come to Alberta and create a centre of creativity in this highly important field. That would encourage other students to take up this study at university. Looking at some of the woes students currently have in finding jobs on graduation and finding a useful place in society, that in itself is a very important benefit to this province.

I heartily endorse this motion. In view of the time spent on it, I wish to adjourn debate. Thank you.

214. Moved by Mr. Cook:

Be it resolved that the Assembly encourage the government to further develop the electrical engineering and computer science departments at Alberta universities to support the new and growing electronics industry.

[Adjourned debate May 10: Mr. Woo]

MR. WOO: Mr. Speaker, for someone who has difficulty changing light bulbs, I'm usually involved in debates regarding engineering, sciences, and so on. I do have an interest in motions of this nature, particularly this one, in a very specific way and certainly within the broader context of education and what this motion implies.

In rising to support the motion of my hon. colleague the Member for Edmonton Glengarry, I am reminded of the many statements that have been made in this House, and certainly where interested groups and academics gather, in terms of the link between education and industrial diversification, research and development, and science and technology. At the same time, I am reminded of the debate concerning our educational institutions being provided with the necessary resources to carry out their mandates.

Given our current time frames, I am beginning to find myself wrestling with the chicken-and-egg theory. Which comes first? Education, which will then shape what economic activities take place? Or do we identify what we believe to be our economic priorities and then educate and train people toward those activities? Depending upon who you talk to, in general I suppose a case can be made on either side of that proposition. But given our current circumstances, I'm not so sure that we are any longer in a position to be afforded the luxury of simply debating the issue; nor do I believe we can control the outcome to satisfy the narrow perspectives based simply upon provincial concerns, as important as those might be.

As I read it, there is a lot of space between the beginning and the end of this motion, particularly when I look at it within a much broader universal context relative to the microelectronic and high technology industries. From a provincial standpoint, the two immediate concerns that come to mind are, firstly, the need to identify and fulfill provincial objectives and responsibilities and, secondly, the conflict of both public and private pressure of having to do more but wanting to pay less for it.

I agree with the hon. Member for Edmonton Glengarry that electronics or microelectronics, in all its high-tech forms, will

continue to change the face of our society. We cannot stop that change, nor do I think we should. I think the challenge we face today in terms of those changes is: how do we control and adapt to changes that will ensure the upward movement of the quality of life, the enhancement of living standards and, in this instance, the role of our educational institutions, particularly our universities, colleges, and technical schools?

Today we continually hear of the need for and the shortage of university graduates with international experience and expertise in commerce and law, engineering and design, scientific and medical research, computers and technology. On the other hand, I hear the debates within universities and educational interest groups as to whether or not a balanced or right mix of graduates is leaving our campuses in sufficient numbers and armed with a sufficient variety of knowledge to meet the challenges of a society that is constantly changing.

My hon. colleague's motion tells me that there is a need to preserve and enhance our present expertise in the electrical engineering and computer science departments of our Alberta universities and technical schools. I think it is important that such institutions continue to contribute toward the development of highly qualified manpower to support our electronics industry. We need graduates to work in the field of research and development, we need to develop new products and industries in the field of microelectronics, and we need expertise to improve products and performance of our local industries. Much of this can be done through computer-assisted design and computer-assisted manufacturing.

All of this leads me back to another very important issue, that of university funding within the context of rising costs and restraint. I am personally inclined to see an increase in funding to our universities and technical schools. Given our current circumstances, in terms of where we find ourselves today, I think it is time we did as much as possible toward a revised framework.

Mr. Speaker, it has always puzzled me why every university in this province must be all things to all students. When only one university existed in this province, it seems to me that as complete a range of different faculties as possible within one institution made sense. But I'm not sure that should hold true today, considering the number of universities and technical schools we now have. What is wrong with the view that each university should specialize in four or five select areas and move toward excellence in those areas? For example, the University of Alberta could specialize in medical research, engineering, computer science, and northern, cold-climate agricultural research; the University of Calgary could specialize in oil and gas technology, finance, and mining and minerals; and the University of Lethbridge could specialize in agricultural sciences and research, and experimental research. Certainly I recognize the need to balance such programs with appropriate courses in the arts.

I believe that such an approach could allow, for example, the University of Alberta to specialize in the area of electrical engineering and computer sciences, as one element in its new format. I think we agree that as we enter further into the information age of high specialization, we are going to need more highly specialized graduates within industry, government, finance, and other areas of telecommunications. Specialization carried out in the manner I suggest would not only produce those graduates but allow for the rifling in of funding to specific objectives rather than spreading insufficient dollars over such a wide area that all we end up with is a full slate of mediocrity. At the same time, finely tuned faculties and research units adequately funded in this way will go a long way in retaining and enhancing teaching, and research expertise.

Traditionally, Mr. Speaker, for a variety of reasons we have not been as successful as we would like in retaining expert academic staff. Certainly enhanced long-term funding of programs and salaries has a lot to do with this. But I think there is another equally important factor. That is the further extension of electrical engineering and computer sciences to those opportunities which will allow for greater postgraduate and doctoral training to be carried out at the University of Alberta and, for that matter, at all our universities in the province. As it is now — and I think this is occurring in many areas, especially in medicine — many of our top graduates are leaving the country to further their postgraduate training in specialized areas or in the doctoral area. Many of these highly skilled people, whether they go into teaching or the private sector, do not return to this province. We as a province are that much poorer because of that loss. If government and industry, along with our universities, colleges and technical schools, are serious about making our learning institutions more responsive to job demands, I think we must collectively consider increased funding and how best to use it.

Having said that, Mr. Speaker, two additional things come to mind about relevance in terms of education. Firstly, I believe that ties between our universities and industry must be strengthened. I know, for example, that industrial councils have been established in a number of countries to act in an advisory capacity to the broader university community. At the same time, they have the ability to zero in on those faculties which produce graduates those industries require. Another benefit that results from such a relationship is one that I think would serve a very useful purpose if we adapt it to our own postsecondary systems. This is a situation where practicing engineers — in this instance electrical engineers and computer science technicians — were actually used in part-time teaching positions to augment or supplement from a practical point of view the academic staffs of universities. Industries involved in such programs paid the salaries of their staff on a continuing basis, and the time such staff spent in universities was not a financial consideration in the education budgets of those particular universities. The effect was that on the one hand, universities had additional expert staff at no cost and, on the other hand, industry benefited by getting graduates trained directly in their employment.

The second point I make is simply this, Mr. Speaker: it is my view that this particular debate and those other debates that dealt with science and technology, research and development, biotechnology and so on, and education in its broadest terms bring into perspective this government's white paper for an industrial and science strategy for Albertans, 1985 to 1990. I believe it is important that Albertans take a serious second look, and if necessary a third and fourth look, at that proposal in terms of subjects we debate in this Assembly, particularly within the context of Motion 214. It seems to me that the white paper and motions such as 214 go hand in hand.

Thank you.

MR. JONSON: Mr. Speaker, in rising to speak on Motion 214, I'd like to tackle a few topics that perhaps have not been dealt with by previous speakers. Certainly a great deal of information has been given on the details and the various applications and potential that could arise from the passage and implementation of the theme of this motion. The motion clearly deals with the area of expansion and development in our modern-day world, and it's certainly an area of development in which Alberta could play a very major part both nationally and internationally. I note that the motion is directed at university education. The previous speaker referred to the fact that when we're looking at development in this area, we should be looking at its broader

application among postsecondary institutions and that there should be a plan, there should be articulation with technical institutes, colleges, and various other agencies in the field of postsecondary education.

I'd like to point out that in my view — at the present time it's my view, but I think there would be others who share it — the area of grade school education, grades 1 to 12, has to be included to make any overall program of development in the field of electronics and computer science effective in this province. Right now I think some progress is being made within our school system, but certain things have to be addressed in the immediate future if we're going to provide to the universities, which are spoken of in this motion, the type of high school graduates who will have the background and the enthusiasm for this discipline that the universities will need. There are at least three areas of study at the grade school level which it would have been nice to see included in the motion or perhaps included in the debate before this.

First of all, we have to take initiatives to make sure that students become familiar with the world of computers and their application very early in their school careers. As is the case with taking a second language, there is a great deal of evidence which indicates that young children learn and adapt very quickly to the use and application of computers. It's very important to have students be comfortable and familiar with the application of electronics and computer science right from the beginning of their education. Secondly, Mr. Speaker, throughout the grade school system there has to be integration and use of computers so that when our graduates are heading for university, they're going to be competitive and very capable of entering quickly into the high level of computer and electronics work that the universities are going to be developing. The third area we could be taking initiatives in to complement the message of this motion is that of developing an electronic information network throughout the province, so that the capability, the usefulness, et cetera, of computers and a highly sophisticated electronics network would be before students throughout their educational endeavors, right up to the level of university. They would not be looking at computer science as something that was a bit beyond them or something they were starting with from scratch when they headed into their selection of a university program.

Mr. Speaker, I'd like to mention a second area that is very important to this motion, and to some degree the previous speaker dealt with it very well; that is, the element in the motion of there needing to be some direction to universities to meet certain areas of need in the province right now for the training of our young people. We've gone around this particular issue quite often in the field of education. Certainly there is merit in the liberal arts approach of our universities, in the offering of a broadly based education. In the meetings I go to where we have general discussions on education, I'm always impressed by the extent to which not only the students but the general public support the view that our educational system should serve the interests of students. Perhaps they don't always mean this, but sometimes they are thinking in terms of education relating more to the students' area of interest than to the realities of the world in which they're going to have to find employment.

This motion zeros in on by far the most talked-about, the most obvious area for the government to work with universities to set a priority on further training. But I see many examples of obvious areas where our postsecondary institutions could be providing graduates educated in Alberta, and they are not doing so. I know they're caught in a kind of overall dilemma because they want to serve the interests of students. They have various restrictions in terms of budgeting, and they have a very large

and cumbersome system of allocating the resources. Nevertheless, for years we've been short of speech therapists in this province. We've been short of physiotherapists and have imported them from outside the province at a time when there was an overall surplus of workers within the province but they didn't have the specialized training needed in these areas. I would suggest, Mr. Speaker, that when we're talking about such a major matter as the preparation of students for the world of computers and the application of computer capability, we cannot afford to go for years with a lack of direction and production from our universities in the area of electronics and computer science.

Perhaps one alternative to the message of the motion might be to establish in the province of Alberta an institute of computer science separate and distinct from our universities. I hope that is not a direction we have to consider immediately. I feel it is very important at this time — in fact it's probably past the time at which it should have been done — that a model for the development of programs and co-operation among universities, business, industry, and government be developed so that resources can be directed in certain areas, such as the one mentioned in the motion. That doesn't have to be battled with on the basis of being a violation of university autonomy. If approached in the right way, I think the universities would certainly see the need for and the benefit of this type of co-operation. It would mean, however, that universities and all concerned would have to look at the application of specific amounts of funding, perhaps paying salaries beyond and in a more flexible manner than the usual university salary scale and a whole host of other more flexible and innovative approaches to staffing, equipping, and offering a program than currently seems possible within our universities and postsecondary institutions.

A third area I would like to mention with respect to this motion is that although I realize I'm not quite up on all the jargon of the electronics industry, I find that the motion refers specifically to electronics and computer science. Perhaps previous speakers have dealt with this adequately, Mr. Speaker, but I think it should be emphasized that it does not seem likely that Alberta is going to be a world leader in the development of basic computer equipment. I'm certain that IBM, Apple, Commodore, and a host of other very established companies are well on their way in that particular area, although it would certainly be great if they would consider expanding and establishing branch operations in Alberta. I imagine the intention of the motion is that the emphasis should be on programming — the application and development of software — and the modification of developments in that area to the areas of expertise that we have in the province. Certainly we can point to — and previous speakers have — the areas where we're already somewhat of a world leader in the application of computers to industry: agriculture, the oil and gas industry, and telecommunications. I think that is the area we have to work within.

I'd like to make a couple of other comments on the motion. First of all, there is certainly a role for government to play in this area to enhance and augment the efforts of private industry as well as that of the universities. I can see and understand that universities could be the leaders in certain aspects of developing this type of industry within the province, but I hope that we never put all our eggs in one basket, so to speak, in terms of looking for leadership in research and development. The whole area of the computer industry is very flexible and very mobile. A new type of cottage industry is developing, because work and progress in this area isn't tied to a massive physical plant in one particular part of the province or the world. We can

look for a great deal of worthwhile research and development and a great deal of useful application of that development from private industry, from our smaller colleges and technical schools, and from a host of other areas besides the universities.

Finally, Mr. Speaker, I would like to offer one other thought in terms of the direction pointed by this motion, and that is that perhaps this has to take place at the grade school level that I started talking about. But along with our effort to develop a competitive industry in this field, I think we have to look at making people aware of how it will affect their life-styles and the various implications this is going to have for the way we live and operate within the province in the years ahead. I do not think attention to that has to in any way inhibit the development of electronics and computer science. In fact in the long run I think it will enhance it, because we will have a population of young, middle-aged, and old people who accept and work to their advantage with the developments that come out of this area of industry.

I would like to put on the record that I commend the Member for Edmonton Glengarry for bringing forth this motion. I certainly support its overall direction and, if passed, I hope some of the aspects of the application of this motion that I brought forward could be considered down the road.

MRS. KOPER: Mr. Speaker, I'm pleased to speak on this motion regarding electrical engineering and computer science programs. I feel that the reasons the Member for Edmonton Glengarry gave for presenting this motion to the House are now more important than ever. He felt the motion was timely because there was an economic strategy paper about to be presented at the time and the education curriculum was being reviewed. He felt it was extremely important that we focus on this type of motion in light of these two facts.

I think members all recognize the changes in our province over the years that have made it important to consider different strategies for our universities. We note that there have been drastic changes in our economy. The people in the work force have changed from largely agrarian workers to more workers in the information field. We now have a greater interest in export markets, and we have a position in world trade as a province. Because of that, Mr. Speaker, I think the new technologies present a great opportunity for us.

It's interesting that over the last 12 years, there have been a staggering number of breakthroughs. For instance, the power of the computer has increased 10,000 times in the last 14 years, and the price of each unit of performance has decreased 100,000 times. Another incredible fact is that worldwide robot sales have grown at the rate of 35 percent annually for the past three years. Another fact: IBM spends \$1.2 billion each year on computer research alone. The pocket calculator of 1990 will have more power than our most powerful computer today. In working for the Calgary Board of Education six years ago, I recall that we were trying to invest in a computer that would look after the inventory. That computer would fill a small room. That inventory can now be well looked after with a small personal computer.

[Mr. Speaker in the Chair]

I think this transformation is also very obvious in the work force, Mr. Speaker. Over the past 30 years, the number of Canadians employed in information-related jobs has grown twice as fast as the work force as a whole. Today more than 40 percent of Canadian workers are in information fields. That's an increase of at least 20 percent since 1931, and there is absolutely no sign of its slowing down.

Mr. Speaker, I feel that's why this motion is so important, and I'd like to reflect briefly on the technological changes in Alberta. In this province there are more than 250 computer technology companies. They're mainly based in Calgary and Edmonton, and they employ about 9,000 people and generate revenues of more than \$750 million for our province. It will also be given a great boost by the introduction of the Cyber-205, the most remarkable supercomputer. It will thrust us into the still barely explored world of artificial intelligence and ultrasophisticated programming. This machine was recently announced by the University of Calgary as one of the most powerful computers in existence and will certainly be of assistance to the industry in our province. There are only about 60 of them in the world, and I'm proud that this one is coming to Calgary. It will benefit computing science students at all three Alberta universities. There will be access to several thousand hours of machine time in other universities: about ,800 more terminals at the University of Alberta and about ,200 more at the University of Calgary, in addition to 200 more at the University of Lethbridge. This capability will greatly improve the offerings in computer technology at our universities at the present time.

The computer is also being used in quite a unique way, because several thousand hours of computer time will be sold to government and private industry in order to help recoup some of the costs. I think this very innovative idea by our Minister of Economic Development will help industry to use the resources of a supercomputer in order to help Alberta companies develop their software and electronic products. Indeed, this computer will contribute to the maintenance of the leadership Alberta has played in the petroleum industry and to the introduction of new technology. As well, I guess it will improve the quality and the facility of the courses at the university. In the University of Calgary, the Department of Electrical Engineering is 18 years old and has graduated 16 classes. As a faculty, however, it is still heavily oversubscribed. They have also introduced a minor in computer engineering programs, which has been in operation for four years. In 1984 the second class of graduates will be getting their diplomas.

I think notable strides have been made at the University of Calgary in the undergraduate electronics teaching program too, Mr. Speaker. The labs have been modernized and are truly far more innovative than they formerly were. There are new initiatives being taken to modernize the electronics offering, particularly in the very large scale integration. I am certainly not an expert on computer technology, and in reading all the information on this, I found it very difficult to know that the letters VLSI stand for very large scale integration, which means the ability to get a silicon chip and almost have it in three dimensions so that the capabilities of a very large computer are now possible in a much smaller circuit.

At any rate, our small faculty of electrical engineering in Calgary is continuing to struggle with the challenges of the 1980s and is working very hard on VLSI. They also have a high interest in research and have received about \$339,000 for research. I think some of the projects they are working on are extremely important to the future of technological advances in our province and across Canada: robotics control, polarization of biological cells, and educational uses of computers. We are doing these things in our university and, I hope, being leaders.

Nevertheless, Mr. Speaker, I think it is important in this debate to realize that in the past we have been able to live well on resources that were rather easy to obtain. Perhaps we need to focus on ingenuity and technology, and develop these resources and the technology and brainpower with it. In talking about the white paper and an industrial and economic strategy

for the future, I think we must realize that there is a route to becoming competitive in the sectors of the industry where their products are going to see increased demands. I think these industries are based on the technologies we've been discussing this afternoon: biotechnology, telecommunications, and micro-processors. We need to be active in those fields to balance our natural resource base.

We can't continue being totally dependent on the shipping of our raw resources. We really must become more dependent on the products of our brains, our people, and our management, not just our mines, minerals, forests, lakes, and trees. I think these new technologies represent a great opportunity to us in Alberta, and we must co-ordinate our academic, business, and government efforts toward application and development in new technology-related products and techniques.

Alberta has the ingredients, Mr. Speaker, and I think they are worth looking at. We have government encouragement and even a good financial commitment. We have universities that are forward looking and interested in state-of-the-art research. We have a place where people want to come to live. We have a combination of entrepreneurial flair and government initiatives. I think with that, the technology industry can survive well in Alberta.

I am pleased that the Member for Edmonton Glengarry brought this forward to discuss. I feel it fits very well with the initiatives for decentralizing in this province. I think it will provide a way for us to translate the ideas from the university lab into products for world-scale competition. Japan has quite baldly stated that its aim is to dominate the world with fifth generation systems in the comparatively near future. I feel that we in Alberta have a part to play in meeting that challenge.

Thank you.

MR. OMAN: Mr. Speaker, in the few minutes that are left, I want to follow in tandem with the former speaker who, along with others, has laid out pretty well some of the things that are happening here in Alberta. There's no question that the topic is current. Also, there's no question that there's more demand in our universities in both these areas than there is room for those students who want to take the subjects.

It was my pleasure to attend the western legislators' conference in Phoenix, Arizona, a couple of months ago, Mr. Speaker. One of the topics at that time was the area of economic diversification, particularly in the western United States. It was interesting to note that they're facing the same kinds of problems we are: declining agricultural and lumber products, and incomes. Of course down there high tech, the electronic industry is booming and mushrooming.

They had a panel on what brings high tech or success in these areas to a particular location. Obviously there are certain things such as trained manpower. But one of the greatest things was the amenities, along with a work force that was dependable. I talked to Mr. David Carlson afterwards, indicating our interest. He said it would be foolish for us to try to duplicate Silicon Valley in California; rather we should apply what they are doing down there to particular or specific industries here.

The other interesting thing was that the vice-president of Arizona State University addressed a luncheon at the conference and was part of the panel. He indicated that it wasn't really because of high tech training in the university that high tech industries located in a particular location. He said that highly trained people will follow industry, provided the amenities are there for them, which includes a well-balanced university training as well as other amenities such as good orchestras and skiing in the mountains, as the case may be. So I think it's

very important that we have a totally well-rounded program in order to attract high tech.

The other thing is that industry will go where there is government Encouragement as well as entrepreneurial spirit. I think we've got something happening in Alberta which is very important for our future. I speak as a Calgarian, because I know more of that city. I understand that Calgary is the third largest computer centre in the world, following London and Houston. As a probable result of that, in the last few years some very significant high tech industries have developed in our city. For instance, Teknica Resources began sometime in the mid-70s. They are involved in making coloured maps, if you will, of seismic areas by computer. They now employ about 40 people in Calgary and 30 in Houston, exporting our expertise. Wil-lowglen, the failed company that we gave some impetus to, has now come to life, employing some 80 people. They've recently landed a \$6 million deal with California Waterworks. Cov-Can Systems, which detects leaks and fuel flows in pipelines, now has 32 employees in a high tech industry. Albion Microelectronics . . .

MR. HORSMAN: I hesitate to interrupt the hon. member, but in a moment the time for the day will have run out, and there are things that have to be done, I hesitate to do this, but I move that we stop the clock.

MR. SPEAKER: Does the Assembly agree?

HON. MEMBERS: Agreed.

MR. SPEAKER: It is so ordered.

MR. OMAN: I'm almost done, Mr. Speaker.

I could mention NovAtel, Keyword. All I'm saying is that we have been saying private industry should be the generator here, and I think that's exactly what's happening. I think the university is then a kind of mate which goes along, which senses the needs.

The motion is right. There is probably a danger of over-funding. I think the Member for Ponoka indicated that we are in a revolving situation which develops very quickly. There needs to be a balance here but, all-round, I think we are encouraged by what's happening in Alberta. I applaud the provincial government for taking the initiative, as our speaker already said, in putting the supercomputer in, which is going to help the industry across the province. It's a good motion. It needs good study. Things are happening; let's encourage it.

Thank you.

MR. HIEBERT: Mr. Speaker, in light of the hour, I would adjourn debate.

MR. SPEAKER: The hon. member has moved that debate be adjourned. Does the House agree?

HON. MEMBERS: Agreed.

MR. SPEAKER: It is so ordered.

MR. HORSMAN: Mr. Speaker, as I have informed the opposition, this evening it's proposed that the Committee of Supply deal with the balance, hopefully, of the estimates of the Alberta Heritage Savings Trust Fund, following which it is the government's intention to proceed with second readings of Bills on the Order Paper, starting with Bill 69, which was adjourned by the hon. Minister of Municipal Affairs, and then proceeding

with other Bills, not including any which were placed on the Order Paper yesterday for first reading.

Therefore I move that when the members assemble this evening, they do so in Committee of Supply and that the Assembly stand adjourned until such time as the Committee of Supply rises and reports.

MR. SPEAKER: Having heard the motion by the hon. Deputy Government House Leader, do you all agree?

HON. MEMBERS: Agreed.

[The House recessed at 5:32 p.m.]

[The Committee of Supply met at 8 p.m.]

head: **COMMITTEE OF SUPPLY**

[Mr. Purdy in the Chair]

MR. DEPUTY CHAIRMAN: Will the Committee of Supply please come to order.

ALBERTA HERITAGE SAVINGS TRUST FUND
CAPITAL PROJECTS DIVISION
1985-86 ESTIMATES OF
PROPOSED INVESTMENTS

**Department of
Energy and Natural Resources**

I — Alberta Oil Sands Technology and Research Authority

MR. DEPUTY CHAIRMAN: Does the minister have any comments?

MR. ZAOZIRNY: Mr. Chairman, I think it would be appropriate to make one very brief comment, and that is with respect to the outstanding contribution made by Dr. Clem Bowman during his term as chairman of Alberta Oil Sands Technology and Research Authority. As members will be aware, Mr. Bowman has now returned to the private sector. We're delighted to have Mr. Reg Humphreys on board as the new chairman. I think I would be remiss, however, in not putting on the record the view I hold, which I'm sure is shared by other members of the Assembly, of the outstanding contribution Dr. Bowman made in the pioneer years of AOSTRA. It's very much a credit to his skills, and his contribution is a real credit to the progress that's been made in this province in the oil sands area.

MR. MILLER: Mr. Chairman, I would like to reiterate what the minister has just said, and urge every member to take time to read the annual report that was tabled yesterday by the minister. It gives you an idea of the tremendous number of ongoing projects that have been initiated by the Alberta Oil Sands Technology and Research Authority. As you are all aware, it is the one vehicle where we have government, the university, and the industry working together. It's a well-known fact that every dollar spent in research returns itself many, many hundreds worth after that.

One thing I would like to mention that would be of interest to members this evening is that although there are a lot of

programs that you can read about in this report, there is one program that was initiated after this report was printed. That is our underground test facility, which has tremendous implications if it proves successful. This is where we're putting two shafts through the oil sands, down into the limestone. This is an area northwest of Fort McMurray where the overburden is such that it can't be removed economically by dredging. There's not enough overburden for pressure steam flooding. That vast resource is such that if this proves successful, where we have the two shafts going down an underground tunnel and horizontal drilling, it will probably be the greatest thing we've ever envisioned for the development of the oil sands. The road is being put in place, the shafts are to be commenced at the beginning of the new year, and a year from now I would like to be able to report back that everything has been working successfully.

I join with the minister in congratulating Dr. Bowman for his work. He was the original chairman of the board and has just recently returned to private industry with the Esso corporation. He spent 10 years with AOSTRA, and his impact will long be remembered. I am delighted that we have a new chairman, Reg Humphreys.

Thank you, Mr. Chairman.

MR. MARTIN: Just a couple of questions and comments to the minister, Mr. Chairman. In the heritage trust fund discussions that we held earlier, I remember that we heard about some of the advances made in the tar sands. If I recall, the minister alluded to some of them. I am a little curious about two areas. If we look at the estimates on conventional oil enhanced recovery, we're going down some \$5 million, from \$15 million to \$10 million. I would think this is still a rather important area. My question would be, why are we having the \$5 million cut there? At the same time, could the minister update us somewhat on where we stand with conventional oil? Is it something that is economically feasible at this time in a great part of Alberta, or is it still in the infancy stage? In other words, have we got the applied part of this out of conventional oil recovery?

The other area is the technology developed by AOSTRA. My question to the minister is simply this: if the technology developed by AOSTRA goes outside Alberta, if other jurisdictions want to use it, do we get money back? I'm thinking especially of conventional oil recovery.

MR. DEPUTY CHAIRMAN: Would the minister like to respond?

MR. ZAOZIRNY: Mr. Chairman, I'd be happy to do so. I might invite my colleague to supplement my answer in more detail, given his ongoing working relationship with AOSTRA.

I should say at the outset — and the member will recall — that we discussed the matter of forecasting the budgetary requirements of AOSTRA in a previous appearance before the House. The late Member for Spirit River-Fairview asked a specific question in that regard, as to why there appeared to be some deviation. We responded by explaining that there is some difficulty in these forecasts in the first instance, because the ability of projects to proceed turns on that partnership with the private sector. That is an ongoing situation. I would suggest to the member that in terms of the budgetary circumstances that he's looking at this evening, it's not a situation where we're seeing a lesser focus on conventional oil enhanced recovery; rather, it's a situation where we're zeroing in on the specific amount of dollars required in that area.

There have been a number of programs implemented in the conventional oil enhanced recovery sector, which my colleague may wish to comment on. I could comment on the general

success we've had in enhanced oil recovery by saying that we now have some 31 enhanced oil recovery schemes ongoing in the province of Alberta. Those schemes, which are of a commercial nature, are estimated to produce some 800 million barrels of additional conventional production in the next few years that would not otherwise occur. So in terms of our general enhanced oil recovery incentives, we're seeing considerable success in that area. What AOSTRA has been trying to do is in fact move almost to a tertiary recovery stage, which really goes a step beyond the commercialization aspect of it. I would invite my colleague the hon. Member for Lloydminster to comment on that.

As far as the utilization of the technology outside Alberta is concerned, to the extent that we have an ownership interest in that technology, yes, we receive benefits flowing from its utilization elsewhere.

MR. MILLER: Mr. Chairman, if I might just supplement the minister's answer to the Leader of the Opposition, I would just like to say that the development of the technology aspect is actually what is most important to us. When we are in partnership with industry, we make very certain that we are a participant in the patents and technology which are developed. I should say that the technology that is developed can be used by the company that develops it, and we as a partner take part in the sale of that technology to other companies either within or outside of Canada.

I believe everybody should be aware that the conventional oil as we see it here in Alberta is depleting very rapidly. This is why, as the minister stated, our secondary and tertiary recovery is so important to us today.

As far as the budget goes, I think the hon. Leader of the Opposition can appreciate that it's hard to schedule just when a dollar is going to be put in, whether it's going to be this year or next year. We budget a certain number of dollars, but it is dependent on the phase in which the work is being carried out.

MR. MARTIN: To follow up, if I may, Mr. Chairman. In terms of the enhanced recovery — I believe the minister said 31 areas — one of the questions is, is it to the point now that it's relatively . . . I remember seeing figures comparing the potential in Alsands, and I was told at that time by some people in the industry that the enhanced recovery was perhaps even more feasible in some areas. Is there any sort of ballpark figure that we can get — I realize it depends where in the province — on how much it would now cost for a barrel of oil under that enhanced recovery? Is that feasible at all in the market at this time, or with our depleting resources, when do we see that it might possibly be?

While I'm up, just one other question. If we do have the patents on this and we do receive some money back from the technology, do either of the hon. members have a ballpark figure of the kind of money we've received back in terms of patents since AOSTRA has been started? I'm not expecting it to the nearest nickel or dime. I just wonder if that information is available.

MR. ZAOZIRNY: Mr. Chairman, I'll respond to the earlier part of the question and invite my colleague to respond to the latter part. With respect to the economics of enhanced oil recovery, I think again we should be clear so there's no misunderstanding. The type of enhanced recovery that AOSTRA has been involved in is of a more advanced type than the typical enhanced oil recovery which involves those 31 projects I alluded to. The commercial-scale enhanced oil recovery projects that are ongoing right now involve using a miscible flood

where natural gas is pressed onto the oil reservoir. Through that process a much larger proportion of the conventional oil is recovered. I think if one were going to talk generally, upwards of twice as much oil is recovered through that process.

That is an economic process. What has enhanced its economics very considerably is the section 4.2 royalty deferral scheme that the province implemented a couple of years ago and has built upon, whereby we do allow some royalty abatement for specific projects if we are satisfied that in the overall there will be a net economic benefit in terms of royalties received by allowing that abatement to occur in the early part of the scheme.

The answer to the hon. member's question is that yes, enhanced oil recovery schemes of that nature are very clearly economic, given the fiscal regime that has been put in place. With respect to what should be called tertiary recovery schemes, many of them are at more of an experimental level. One interesting one is the Viktor Resources scheme, which is a carbon dioxide injection into patterns which was begun earlier this year. That has a slightly different approach than in the conventional enhanced oil recovery. The economics of those will be determined based upon the success of the various experimental schemes that are in place.

With respect to the amount of funds that have been recovered, I believe it's in the order of \$12 million or so, but perhaps the hon. member could give a more specific figure than that.

MR. MILLER: Mr. Chairman, to the Leader of the Opposition, I haven't got that figure, but I think that you would appreciate that although we're getting money back from the technology that we have been able to develop through working with the industry, the greatest concern we have is to be able to have an experimental project that then becomes a commercial project. I refer specifically to probably the most successful one we had, the Shell project up at Peace River, where we had an experimental project which is now ready to go into a commercial project. The development alone is going to create so many jobs and so many opportunities for the people in that area that this is something you just can't put a price on when it comes to what AOSTRA has done. Other examples are the Wolf Lake project, where BP went in and, along with AOSTRA, developed a process where now they're able to become commercial. Similarly with the Esso project up in Cold Lake, there are various other smaller projects that are in the experimental stage, and the process is developed whereby it becomes commercial to develop the resources, basically within Alberta.

The spin-off is that some of the technology is used in other countries. For example, Madagascar has sent some oil sands over that are being processed down in Calgary under the Taciuk process, to see if that technology won't enable Madagascar to be able to become self-sufficient in the oil that they need in their country. There are these other factors. I apologize for not having the actual number, but the greatest spin-off is the commercial projects we're getting here in Alberta.

MR. MARTIN: Just to follow up, I agree totally with the member, when he talked about research and development. Of course it's very important, and you can't begin to estimate in terms of dollars. I was curious about types of technology. You mentioned Madagascar. Are a number of countries now using the research we've done with AOSTRA throughout the world, or is it just mainly in the United States and Canada? Madagascar was another one. Are there some other brief examples of where our technology from AOSTRA is going?

MR. MILLER: There has been interest shown by Australia and Brazil, two countries in particular that are interested in our technology. A year ago last February, China sent 12 people over here to see how we were drilling wells under our winter conditions, which are similar to conditions in China. These countries, along with Venezuela . . . We have an ongoing dialogue where we're getting technology from other countries to do an appraisal, and our technology is being used by them. So it is more or less a worldwide sort of an organization that works together to maximize the oil production.

MR. MARTIN: Following up on that, Mr. Chairman, a final question. Other countries are sharing somewhat, and we get money back on the patents. Is there an equivalent of an AOSTRA in some of these other countries, so that we are actually receiving some new ideas and technology from these countries that are also benefitting from ours? Are we alone in the type of an AOSTRA in terms of conventional oil recovery and oil sands technology?

MR. MILLER: No. France, for example, has an upgrading process that we are looking at, at this point in time. We have a relationship with China, but I would hesitate to say whether it's a formal one or an informal one. Certainly there is a common interest in the development of the resource. As I said before, we do have dialogue, but whether it's on a formal or informal structure, it's working.

Agreed to:

Total Vote 1 — Alberta Oil Sands

Technology and Research Authority	\$50,000,000
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3 — Maintaining Our Forests

MR. DEPUTY CHAIRMAN: Has the minister any comments on that? The hon. Member for Redwater-Andrew.

MR. TOPOLNISKY: In Vote No. 3 we're dealing with maintaining our forests. The objective is twofold. First, it is to re-establish and to improve the productivity of coniferous forests which have been damaged by fires or industrial clearings; secondly, it is to develop technology for future improvements in forest productivity. There are four subprojects or four parts to the program, and I wish to comment on the first two, reforestation and tree improvement.

In regard to reforestation, the Pine Ridge forest tree nursery, which is in the Redwater-Andrew constituency, plays a very important part in developing and maintaining reforestation operations. This forest industry is one of the most highly developed and specialized of its kind in North America or perhaps in the world. It does almost everything, from extracting seed and growing seedlings to research. It has a capacity of 18 million seedlings grown outdoors and another 20 million grown in greenhouses. In order to accomplish this, the capital cost of the whole complex is in the neighbourhood of \$16 million, and its operating budget is about \$3 million. There is a permanent staff of 40 people, and during the growing season about 300 people are employed. The intent is to reforest 10,000 hectares annually or about 55,000 hectares in the next seven-year period.

On the question of tree improvement, to improve the quality of seedlings grown at Pine Ridge, facilities have been provided for nursery personnel to carry out a continuing investigation into seedling production, as well as developing and assessing new production techniques. At Pine Ridge there is a research lab to develop genetically superior trees for reforestation. The principle of selection for breeding is the same perhaps as in

agriculture, with one difference. In the case of agriculture the time span is in months or years, but in forestry they work in terms of decades. Trees planted today will be ready for harvest for pulp 80 years from now, and for sawmill logs in about 100 years to 120 years. By systematically selecting seed from superior trees in the forests, Alberta Forest Service hopes to come up with a hardy, faster-growing, thicker, taller, straighter, pest- and disease-resistant tree in a few years. Top yield and top quality is the objective.

Forests, of course, are the precious heritage we have. Several caucus committees have toured the facility. The Member for Athabasca is chairman of the forest caucus committee, and his members have toured the facility. The Member for Barrhead, who is chairman of the Alberta Heritage Savings Trust Fund, and his 15-member committee have also toured the facility.

Perhaps this is an opportune time to get on record regarding the access road to Pine Ridge off Highway No. 28, which is a distance of about three miles. This road requires continuous maintenance because of the large volume of traffic. There are several hundred employees and at least 50 semitrailer truckloads of spruce and lodgepole pinecones on this road during the growing season. Therefore this short stretch of road certainly should be paved, perhaps at the same time that Highway 857, which is nearby, is possibly paved next summer. This particular road is a county road, but the county of Smoky Lake does not get any direct financial benefit. I believe it should receive some grant in lieu of taxes.

Mr. Chairman, with the \$4.2 million vote, I hope that this particular access road is also taken care of.

MR. MARTIN: Just a very short comment to the minister and the Member for Redwater-Andrew. I went along with the late Leader of the Opposition on that tour last summer. Through the minister, I have to thank his department for the courtesy of going along with this and all that they did for us at that particular time. I hope the minister will pass that on.

I think this is an excellent program. I'm told that we're far ahead, and I have no reason to doubt it. If B.C. had done this some time ago, they might not have some of the problems they have right now. They're not even able to catch up with all the years of waste that have gone before. I would just like to compliment this government on this program. I think it's an excellent and a farsighted program. I was very impressed.

DR. REID: Mr. Chairman, I would just like to make some brief remarks about recent developments in the forest sector in Canada. There has been a lot said about the poor state of Canada's forests due to overharvesting, nonreplacement, acid rain, and many other factors. The facts of the matter are that here in Alberta we've been very fortunate, by reasons of history, government involvement, and private sector involvement. Although we've had a very large forest resource, historically it has not been fully developed. More recently, since major developments have come to the province, the private sector companies that have been involved have done an excellent job of reforestation. In fact what we've seen has been the ideal relationship between government and the private sector, in that by and large the private sector, on the larger forest management agreement areas, has performed beyond anything that is expected anywhere else in this country. They've done that because programs were developed by the previous government along with St. Regis Paper Corporation of New York and subsequently the Procter & Gamble corporation to ensure that the forests were indeed a renewable resource.

The development of the program that we are discussing this evening is of course a government initiative developed partly

on the basis of input from Des Crossley, who used to be the chief forester at St. Regis, and other people who proposed to the government that this was a valid use of Heritage Savings Trust Fund moneys.

As I said, the combination of the private sector involvement and the government involvement through the Alberta Heritage Savings Trust Fund does ensure that in the future there will be forests as least as productive as and possibly more so than those we currently have in the province, due to the increase in the quality of the trees that are substituted for those that have been cut, as the Member for Red water-Andrew was describing.

What triggered my entering the debate this evening was that in the last week there have been two programs on the Canadian Broadcasting Corporation television network which have very carefully avoided mentioning the situation in Alberta's forests while painting a picture of gloom across the country from Pacific to Atlantic. It would appear that this particular corporation is not interested in describing the facts but only in presenting the down side of Canada's forests. It would have been well to the advantage of Albertans had they been honest in their reporting and indicated to the people of Alberta that their forests are not in the same state as those of some other provinces. It's for that reason I've entered the debate, and I would hope that that corporation would take note of my remarks.

MR. DEPUTY CHAIRMAN: Has the minister any concluding comments?

Agreed to:
Total Vote 3 — Maintaining Our Forests \$4,214,100

MR. ZAOZIRNY: Mr. Chairman, I move that the vote be reported.

[Motion carried]

Executive Council

Alberta Research Council

1 — Electronic Products Test Centre

MR. DEPUTY CHAIRMAN: Has the minister any comments?

MR. PLANCHE: When the Bell-Northern group arrived in Edmonton, they undertook to assist us, along with the Alberta Research Council, in identifying capital expenditures that might improve the prospects and potential for our high technology industry revolving around electronics. I think they identified four or five, and this was one of the first to be put into place. It will operate out of the new facility that the Alberta Research Council is building in Mill Woods. The capital costs will come out of the Heritage Savings Trust Fund; the operating expenses will come out of general revenue. It will afford an opportunity for our local entrepreneurs in this sector to have their products tested, have them suitable for certification for export, tested to destruction and hostile environments, and assist them for research and development of their products for export. It will offer them an opportunity to have this done here instead of having to send it out of the province. We estimate that the general revenue will probably be called upon to meet deficit costs for the first three years and that perhaps it will become self-sufficient in year four. In the meantime it will be under the auspices, direction, management, and supervision of the Alberta Research Council.

Agreed to:
Total Vote 1 — Electronic Products Test Centre \$1,385,000

MR. PLANCHE: Mr. Chairman, I move that the vote be reported.

[Motion carried]

Department of Public Works, Supply and Services

1 — Capital City Recreation Park

MR. DEPUTY CHAIRMAN: Does the minister have any comments?

MR. CHAMBERS: Mr. Chairman, only briefly to point out that Public Works, Supply and Services are involved only with the purchasing of land for the park. The allotment of \$1 million is an item that's in there in case the city of Edmonton has somebody come forward and offer their property for sale. It's sort of an annual allotment that's put in there to cover that contingency.

Agreed to:
Total Vote 1 — Capital City Recreation Park \$ 1,000,000

2 — Fish Creek Provincial Park (Land)

MR. DEPUTY CHAIRMAN: Has the minister any comments?

MR. CHAMBERS: The same thing, Mr. Chairman. Public Works of course was responsible for the land acquisition. The money in there is really to cover legal expenses for the six expropriation cases as per the Expropriation Act, in which the government is required to pay the legal expenses of the expropriated party.

DR. CARTER: Mr. Chairman, just a brief question to the minister. Are we then able to assume that this brings to completion the project of the acquisition of land, and all the attendant expenses?

MR. CHAMBERS: The remaining property has been essentially paid for in terms of most of the settlement. As I recollect, the appeal was heard on October 12, and I suppose a further appeal to a higher court is possible. So I couldn't comment further on that. But, yes, as far as the land acquisition, that would cover it. Again, the money in the vote is to cover the legal expenses.

Agreed to:
Total Vote 2 — Fish Creek Provincial Park (Land) \$1,780,000

MR. DEPUTY CHAIRMAN: Would the minister like to make the necessary motion to report.

MR. CHAMBERS: Mr. Chairman, I move that the votes be reported.

[Motion carried]

MR. CRAWFORD: Mr. Chairman, I move that the committee rise and report.

[Motion carried]

[Mr. Speaker in the Chair]

MR. PURDY: Mr. Speaker, the Committee of Supply has had under consideration the following resolutions, and reports as follows:

Resolved that from the Alberta Heritage Savings Trust Fund sums not exceeding the following be granted to Her Majesty for the fiscal year ending March 31, 1986, for the purpose of making investments in the following projects to be administered by the Minister of Energy and Natural Resources: \$50,000,000 for the Alberta Oil Sands Technology and Research Authority and [\$4,214,100] for maintaining our forests; Executive Council: \$1,385,000 for electronic products test centre; and the Minister of Public Works, Supply and Services: \$1,000,000 for Capital City Recreation Park and \$1,780,000 for Fish Creek Provincial Park.

MR. SPEAKER: Having heard the report, do you all agree?

HON. MEMBERS: Agreed.

MR. CRAWFORD: Mr. Speaker, before we proceed with second readings, I wonder if I might, for the purpose of the Provincial Treasurer introducing the appropriation Acts in respect of the estimates just reported, ask for unanimous consent to revert to Introduction of Bills.

MR. SPEAKER: Is it agreed?

HON. MEMBERS: Agreed.

MR. SPEAKER: Anyone contra?
It is so ordered.

head: **INTRODUCTION OF BILLS**
(*reversion*)

Bill 81
Appropriation (Alberta Heritage Savings
Trust Fund, Capital Projects
Division) Act, 1985-86

MR. HYNDMAN: Mr. Speaker, I beg leave to introduce Bill No. 81, the Appropriation (Alberta Heritage Savings Trust Fund, Capital Projects Division) Act, 1985-86. This being a money Bill, His Honour the Honourable the Lieutenant Governor, having been informed of the contents of this Bill, recommends the same to the Assembly.

This Bill provides for the appropriation by the Legislature of the moneys for the capital projects division for the heritage fund for 1985-86.

[Leave granted; Bill 81 read a first time]

Bill 80
Appropriation (Alberta Heritage Savings
Trust Fund, Capital Projects Division)
Supplementary Act, 1984-85

MR. HYNDMAN: Mr. Speaker, I request leave to introduce Bill No. 80, the Appropriation (Alberta Heritage Savings Trust Fund, Capital Projects Division) Supplementary Act, 1984-85. This being a money Bill, His Honour the Honourable the Lieutenant Governor, having been informed of the contents of this Bill, recommends the same to the Assembly.

This Bill provides for the supplementary revenues with respect to the capital projects division of the fund for '84-85.

[Leave granted; Bill 80 read a first time]

head: **GOVERNMENT BILLS AND ORDERS**
(*Second Reading*)

Bill 69
Municipal Taxation Amendment Act, 1984

[Adjourned debate November 5: Mr. Koziak]

MR. KOZIAK: Mr. Speaker, during my remarks on second reading a day ago, I reached a point where I had described the steps that had been taken to ameliorate the machinery and equipment assessment levels in this province by the Bill and by regulations flowing from the Municipal Taxation Act. I had described one of those, and there are two others that I want to spend just a moment on this evening.

Mr. Speaker, the first is a new concept of depreciation. Rather than the regular 5 percent declining balance, beginning with a 100 percent base, what we have provided for is an immediate and in place 25 percent depreciation, so that all new machinery and equipment is placed on the assessment books at 75 percent rather than 100 percent. It's against that lower value that the other figures are applied.

On the other end of the scale, rather than that machinery and equipment being assessed over time to almost nothing, there becomes a floor or a threshold beneath which no further depreciation is permitted, and that floor or threshold is 40 percent. So what we would have now is a span of 35 percent, and in that 35 percent your full depreciation takes place. The result is that new equipment is given the benefit of an immediate and in place depreciation. Mr. Speaker, I think that concept will encourage new plant construction and will encourage replacement of old plant machinery and equipment in this province. So from that point of view it's extremely beneficial to industry.

On the other hand, there are also benefits that flow to the municipalities and to school boards as a result of the 40 percent threshold or floor. You have then the taxing authorities, the municipal and school governments, realizing that their source of revenue is going to be much more constant than the system by which, in the first year, you start out at 100 percent and then; many years down the road, you may be at 15 percent. If you base programs for your residents on the original level of revenue that you received at 100 percent, you soon find that you can't afford those programs. With this span of 35 percent instead of the theoretical span of almost 100 percent, although you could never get to zero, you compress the spread in the revenue flows that municipalities feel and accordingly provide them with, I think, a better opportunity to respond to the needs of their constituents.

The third aspect of the new assessment levels, Mr. Speaker, is the exemption of water and sewer systems that are owned and put in place by the plant operator. That's only logical, because within the city of Edmonton or settled municipalities that tie in to municipal services, the plant does not have to provide that type of a service. But in rural Alberta, where you may not have the capability of tying in to a municipal service, the plant has to provide for its own water and sewage treatment facilities. Under those circumstances, when the plant must do so, it's only fair that that water and sewage treatment equipment, the lines, et cetera are not in fact assessed. So those are the three concepts.

The other three suggestions that I had made to the municipalities in my letter of March 26 were: the reduction to half, as I mentioned yesterday — the compromise there; the second

aspect, the production allowance — we rejected that as being unworkable; and the third aspect, the combination of the water and sewer exemption plus a pollution control exemption.

When we looked at the pollution control exemption, we found that we couldn't accede to that concept. In some cases, for example in a gas plant, a valid argument could be made that all of the machinery and equipment was in fact pollution control equipment, and that would wipe out the entire machinery and equipment assessment in that municipality. So there was that aspect. There was also the difficulty of determining what in fact was pollution control equipment. Those difficulties led us to the conclusion that that was not the route to go, and we chose the three-pronged approach that I've identified in my remarks yesterday and today.

Mr. Speaker, the only other comment I would like to make relative to the machinery and equipment, the assessment, and the decisions incorporated in this legislation and regulations that flow from this legislation is that I'm pleased with the response I've received from municipalities, industry, and my colleagues in the Legislature to the decisions that have been made. On the whole, the comments have been very positive to the decisions that were made.

I should point out that within the Municipal Taxation Act, Mr. Speaker, we have a concept called a split mill rate. That permits municipalities to apply a different mill rate for different classes of property, provided that residential is the lowest of all classes and the lowest mill rate. In rural Alberta the spread between the highest and the lowest is 25 percent. In urban Alberta there is no similar control mechanism. What can happen is that municipalities can in fact impose a higher mill rate on machinery and equipment than they would on land and buildings.

I would hope, Mr. Speaker, having regard to the partnership that we're involved in as provincial and municipal governments, the common goal that we have for the development and balanced growth of this province and the attracting of industry to this province, that we do not have municipalities abusing the split mill rate concept and in fact taking steps that would negate the positive moves made in the discussions that I have described in second reading of this debate. Were that the case, Mr. Speaker, I would have to raise with my colleagues in this Legislature the concept of split mill rates for discussion as to whether or not split mill rates are in fact the proper way to approach property taxation in the '80s. I presume it won't be necessary for us to consider that, but I leave that, Mr. Speaker, as an open matter that may have to be resolved at some future time.

Other matters besides machinery and equipment are dealt with in the Bill. I don't intend to identify all of them, Mr. Speaker; however, I could bring just a few to the attention of hon. members. One of the things that's happened, Mr. Speaker, is that we find that the installment method of taxes, whereby taxes are paid on a monthly basis rather than a yearly basis, is becoming more attractive in certain cases. The city of St. Albert comes to mind when I suggest this, this evening. There are provisions in Bill 69 to accommodate installment payment of taxes. Now nothing prevented that from happening thus far. It's just that there were difficulties when it came to administering penalties in the event that installments were not made on due date. Those matters have been clarified in Bill 69 to permit a proper installment program to be developed in those municipalities that want to pursue an installment program, for those taxpayers who want to pay their taxes on an installment basis.

I should also point out, Mr. Speaker, that we've had excellent relationships with the two main organizations representing

urban and rural Alberta municipally, the Alberta Urban Municipalities Association and the Alberta Association of Municipal Districts and Counties. In terms of Bill 69, we have incorporated in the legislation many of the suggestions we've received in some cases from those organizations' individual members — the city of Edmonton, the city of Leduc, the city of Calgary, the city of St. Albert — and in other cases from the Alberta Urban Municipalities Association, where resolutions have been passed at annual conventions, and from the Alberta Association of Municipal Districts and Counties, where resolutions have also been passed at their annual conventions. In that way we've been able to respond to the suggestions that have been made to us by municipal governments for a more equitable and fair system of property taxation in this province.

With those brief remarks, Mr. Speaker, I would seek the support of my colleagues in the Legislature for second reading of Bill 69.

MR. MARTIN: Just a few comments to the minister. He alludes to the fact that municipal governments have supported Bill 69. The minister is well aware that not all municipal governments been in favour of Bill 69, and certainly I expect the ones that are affected most by this Bill are the ones around the major cities.

We could argue for a long time whether this is a good Bill or not, but that's not the particular point that I want to make. It seems to me, Mr. Speaker, that when we pass laws by the province that affect municipal governments directly, then at least there should be some transition stage while they attempt to deal with the new financial circumstances they're in. It seems to me that for some of these people — counties around the major cities, like Strathcona or Rocky View in Calgary — this could be a fairly significant number of dollars. It seems to me that after this comes through they only have one of two alternatives: to cut back on some of their services or to go to the property tax payer to add more to them — in other words, a shifting from industry to the property tax payer. We can argue whether that's a good point or not, but the fact is that it comes down from the provincial government, and then the local politicians are the ones that have to deal with it.

Rather than specific questions that we can ask in the Committee of the Whole, I guess I'm asking the minister: when these laws came down from the provincial government, was there any thought for giving a transition stage of three or four years to give them an attempt to get their economic house in order? In some of these ridings even a few dollars can mean a significant amount to local government. The minister is well aware of that. It seems to me we've run into this problem from time to time, and when I talk to municipal politicians, often this is one of their complaints. It applies not so much to what the provincial government is doing. They may agree with some of the principles, but all of a sudden they're the ones that have to pick up the pieces. Mr. Speaker, that is the main criticism I have of the principle of the Bill.

The other is that I worry when we're shifting more onto the property tax payer. I know that the purpose of the Bill is to have lower taxes, to invite industry in. That's only one small part of whether industry's going to come in or not. But if we were taking away in a time of financial restraint and putting more on the property tax payer — I know the minister is well aware that they feel pretty squeezed out there right now, and I wonder how many more times the county or any municipal government can go to that level to get money for their services.

So I guess I'm saying that in the future, before we bring in Acts from the provincial government, whether they're well meaning or not, at least we set up as a matter of course some

transition stage for areas that are affected. It seems to me — unless I'm totally wrong — that they have one of two things to do: cut back services or go to the property tax payer. I know the minister is going to say that in some areas . . . I believe I read some report somewhere that there are 18 municipalities that he talked about that would actually bring in more revenue. I'm not talking about those. Obviously they're not going to be unhappy. I'm talking about the ones where it works the other way, and that's what I mention in terms of the transition stage, Mr. Speaker.

MR. GOGO: Mr. Speaker, I want to make some comments relative to Bill 69. I do believe that the minister earlier, in second reading, in stating the case with regard to the machinery and equipment change, made a very excellent case that we're indeed one of the two provinces in the nation that presently has this type of assessment. I was comforted to hear the minister's comment with regard to the MDs and counties, because as I understand figures I read about earlier, some \$75 million a year is taken in the form of taxation, perhaps a third or better with regard to school boards' requisitioning. I have the same question that I've heard mentioned, and I'm comforted by the minister's answer that the municipal governments will not decrease service. Somehow they will make do with the lower revenue that they can anticipate. I sincerely think that anything that can endeavour to create employment for our young people in this province is welcome. As the minister stated earlier, if these industries cannot compete, if they cannot expand, there's no way they can create employment. So on that basis I'm quite comfortable with the primary principle of the Bill as it relates to equipment.

I would like to point out — maybe the minister can comment when he closes debate — that in many instances the assessment notices, I think required by law to be in people's hands at least 30 days prior to a court of revision, are not occurring in this province in many places. Now that the Act is being opened, I think it's an appropriate place to discuss it. The minister may want to mention that when he concludes debate rather than go to committee stage.

Mr. Speaker, the other point is that I have complaints with regard to the Municipal Taxation Act, which purportedly refers to the amount of interest that municipal governments can charge with regard to late payment of taxes. I understand that penalty is not interest. We get situations where there are interest rates equivalent to 24 percent to 28 percent per year on an annual basis for simply missing your taxes by one day. Perhaps the minister can comment on that.

The final comment I'd like to make, Mr. Speaker, is that to me it's an area that's not very clearly understood by most Albertans. I appreciate that the minister went to the trouble, I think six months ago, to put out that very excellent material on assessments of both residential and farm properties. I think that went a long way towards explaining to the average Albertan just what assessments are all about.

On that basis, Mr. Speaker, I support Bill 69.

MR. SPEAKER: May the hon. minister conclude the debate?

HON. MEMBERS: Agreed.

MR. KOZIAK: Mr. Speaker, the Member for Edmonton Norwood spoke of transition. I wanted to specifically respond to that. It was a concern of mine, recognizing of course as Minister Municipal of Affairs that my colleagues in municipal government have to make the same tough decisions with respect

to their budgets that we have make with respect to our budgets, that they should be given as much notice as possible of changes.

In this concept, we did provide for a transition. The shift from 65 percent to 50 percent for those jurisdictions that are now at 65 percent for their machinery and equipment assessment takes place over a three-year period. In year one it goes down to 60 percent, in year two it goes down to 55 percent, and in year three it goes down to 50 percent. So you have that three-year phase-in, which I think is one of the reasons we've had positive reaction by the municipalities to the way in which this matter was approached.

The hon. Member for Edmonton Norwood was correct when he pointed out that there are 18 municipalities that have yet to do a new assessment on the new basis. They're still at the 22.5 percent level. When they in fact go on the new assessment manual, they'll go to 50 percent. In that case, it's expected that the revenues will increase rather than decrease.

In addition, there are 51 municipalities that have gone to a new assessment this year. They have not yet had revenues flowing on the 65 percent base. So they're moving from a 22.5 percent to a 50 percent level of machinery and equipment assessment. As I've pointed out, 297 municipalities will be phasing down: 65 percent, 60 percent, 55 percent, and 50 percent. I think we have responded in that fashion.

We've worked very well of course with the county of Strathcona. The county has similar concerns to ours, because they're the seat of a considerable amount of petrochemical development. Of course, they would like to attract more and keep the substantial developments that now exist in that county happy. We are working quite closely with the county in the development of this concept and have received positive responses from the county of Strathcona with respect to the ultimate decision that was made there.

I want to thank the Member for Lethbridge West for his comments in supporting Bill 69. When he speaks of the penalty, he raises matters that aren't directly dealt with in the Bill. I appreciate receiving comments from time to time. What happens in the process is that although we really have an 18 percent per annum penalty provision in the legislation, certain municipalities will encourage early payment of taxes by discounting. They will then impose the penalty in stages which month-by-month in themselves would exceed 18 percent, but which taken over the whole year would amount to 18 percent. So if you paid your taxes on December 31, it would be 18 percent. But as the hon. member points out, if you paid your taxes on July 31, the penalty might in fact be 24 percent or 26 percent.

I am not aware of anything in the legislation that is contrary to the municipalities doing that. I know of course that they want to accelerate the payment of their taxes. It's hopeful that the installment payment of taxes concept will ameliorate that type of problem. Municipalities that use that system and taxpayers who pay by that system will then avoid the type of penalty problem that the hon. Member for Lethbridge West points out.

The matter of the timing of assessment relative to tax bills is a matter that I've recently received a complaint on with respect to one of the municipalities that I'm responsible for. It is one that I am reviewing. I don't think there's anything more I can say at this particular point.

Apart from that, Mr. Speaker, I am pleased with the contributions of members to the debate and again ask for support on second reading.

[Motion carried; Bill 69 read a second time]

Bill 71
Alberta Heritage Savings Trust Fund
Special Appropriation Act, 1985-86

MR. HYNDMAN: Mr. Speaker, I move second reading of Bill No. 71, the Alberta Heritage Savings Trust Fund Special Appropriation Act, 1985-86.

This is of course an important Bill, Mr. Speaker, by reason of its uniqueness in Canada and the fact as well that very substantial dollars are transferred into the heritage fund in the proposal in the Bill: 15 percent of the nonrenewable resource revenue in '85-86. I commend to members the report of the select committee of the Assembly recently tabled by the Member for Barrhead. Over the course of the last 12 weeks, a very detailed discussion has occurred in that select committee with respect to the transfer from the heritage fund. That has been important in terms of the work of the Assembly.

As well, I would commend to the Assembly the annual report of the heritage fund for 1983-84, with respect to details of all the various programs in past years which provide a guide for future years. The amount of money involved of course is not known at this time and is not ascertainable. We're talking about the next fiscal year, 1985-86. The 15 percent in the Bill is the same percent as has been the case over the previous two years. As members will note on page 29 of the budget speech earlier this year, that 15 percent is in the range of \$650 million in the existing fiscal year.

The final comments I have to make at second reading, Mr. Speaker, relate to that part of the annual report which details — and I commend members to note that part of the report — where the funds come from. Of course, there are the two sources of funds for the Heritage Savings Trust Fund: the annual transfer, which is the subject matter of this Bill; and the income from the fund. Regarding the latter, hon. members know that very significant amount, in the range of \$1.5 billion, represents moneys which go directly into the General Revenue Fund and in effect pay for the ongoing operating costs of health, education, and senior citizens for approximately two months out of 12. More than half — about 53 percent — of the revenues of nonrenewable resources referred to in the Bill are of course from crude oil royalty, 30 percent from natural gas and natural gas byproducts royalty, about 9 percent from bonuses in the sales of Crown leases, and synthetic crude oil royalty provides about 6 percent. Others, including coal royalties and rentals and fees, are a small percentage of 2 percent.

To conclude, Mr. Speaker, I would just say to members of this Assembly that this continued transfer maintains the province's ongoing commitment, a commitment of some eight years now, to savings as the basic philosophy of the fund. It maintains the real level of the Heritage Savings Trust Fund after inflation. It ensures that the rainy day umbrella, which of course we found so vitally important in budgeting and in bridging the budget realities in recent years, is maintained. I believe it is very much a unique fund that generates confidence: confidence in individual Albertans, knowing that they have that heritage fund safety net there; confidence in families in terms of their budgeting; and confidence in business investors, who see it as something unique which provides stability and permanence for the investment and growth of Alberta in the years ahead.

MR. MARTIN: Mr. Speaker, I wasn't going to comment on the Bill until we had the advertisement from the hon. Treasurer about the heritage trust fund. Fifteen percent has already been decided, and I've sat through the committee meetings. But if we're talking about the role of the trust fund, I would like to go on record right now and say that the original concept of the

trust fund as we understand it was the rainy day, and many people in Alberta say it's hailing right now. The second was as a tool for diversification. If we got into an advertisement, I knew what the hon. Treasurer would say, and I'm sure he knows what I will say if I go into my advertisement: that we think the whole trust fund concept should be changed at this time to be much more of a diversification tool. It seems to me that was one of the original aims of the government when they brought it in. I remember the speeches from the Premier at the time, saying that we would need a decade to turn this around, and that if we didn't have the heritage trust fund as a tool for diversification, we'd be in some difficulty. I think the Premier was right at that time, and I think a decade later we are in difficulty.

In terms of the advertisement, going back to the Foster report that the government has, I would suggest to the hon. Treasurer that this trust fund should be used in a much more active and innovative way, and I believe that most Albertans agree with me. The fact is that the rainy day is already here, and people are now asking how that trust fund, besides the obvious ways — and it has done some good work. I'd be the last one . . . I've just commented to the Minister of Energy and Natural Resources about a project that I think is excellent and has done some good work. But I think people now want more than just capital projects. They want this to go to work in terms of diversifying the economy. In my advertisement, that's of course the message we will be giving to the people of Alberta.

[Motion carried; Bill 71 read a second time]

Bill 77
Public Service Pension Plan Act (No. 2)

MR. HYNDMAN: Mr. Speaker, I move second reading of Bill 77.

This Bill replaces Bill No. 57, which is now on the Order Paper and which will be allowed to die on the Order Paper. Hon. members will recall that Bill 57 was introduced into the Assembly in May of this year for the purpose of allowing an opportunity for debate, discussion, and consultation over the summer. That in fact has occurred and, as a result, some four to five dozen changes, virtually all of them minor, have been made to Bill 77 over the previous Bill 57 now on the Order Paper, which will be allowed to die.

As is the case with all pension legislation, the Bill is a relatively complex one. At this time I would therefore suggest to hon. members that if there are specific detailed questions which they would like to pose in committee with respect to particular sections or subsections of Bill 77 that have complex pension matters in them, I would appreciate a couple of days notice in advance of that so I can bring in several tons of files and background documentation in order to be able to answer the question.

The basic elements of Bill 77 can be quickly stated, Mr. Speaker. First, all the historical existing benefits under this pension plan are maintained. Of course the most crucially important feature of the whole Bill, the guarantee by the government of the province of Alberta, is maintained as well.

Secondly, this Bill maintains the Public Service Pension Board as a separate board. There has been discussion over the last couple of years with those involved in the pension area about the possibility and practicality of combining the six pension boards into one. While there are some advantages to doing that, the general feeling was that by reason of the unique his-

torical background of each of the pension acts, the boards should be maintained separately. That is continued.

Thirdly, in individual cases where individual pensioners wish to appeal a decision of the administration, the traditional quasi-judicial powers of the Public Service Pension Board are maintained, and there is greater precision and clarity provided for the way in which those appeals can take place.

Fourthly, for the first time there is clear confirmation that pensioners will be able to appeal to the courts on matters of law or jurisdiction.

Fifthly, the pension policy will continue to be the responsibility of the Legislature and, as mentioned in the Bill, of the Executive Council, where regulations have been passed, and the pension boards will be responsible for providing policy advice regarding the pension plans. The administration will continue to be the responsibility of the minister responsible: in this case, the Provincial Treasurer.

I think that would be all I have to say at this stage in second reading, Mr. Speaker. I would simply urge the Assembly to approve second reading of the Bill. It is an update. For the first time in many years, it brings together and modernizes this legislation. For example, it provides for spousal benefits that were not there on previous occasions. It has been the result of many, many months and much consultation with those that are involved.

MR. MARTIN: Just a few comments to the hon. Treasurer. First of all, as I recall Bill 39, it has to do with something the Auditor General has talked about a number of times: the unfunded liability. In terms of the principle, can the Treasurer give us some indication how that will affect the unfunded liability after this comes in? This is an important part of it. As I recall back in the spring, I think the unfunded liability would stay about the same as it is with this increase. Maybe the Treasurer could correct me if I'm wrong.

In this part of it, the other aspect — and perhaps there are some other things to deal with in Committee of Supply, Mr. Speaker — has to do with the consultation. I expect there are different ways to consult with people. I would just ask what the reaction of the various groups has been. The teachers would be one group that are involved here, and AUPE. What has been their reaction? Is the Treasurer now saying that after the consultation people see the need for the government to go in this direction, which is basically increasing some of the payments they have to make to their pension? Also, as I recall, the government is paying some more too. I am sort of curious about the consultation that the minister talked about. In concluding debate, perhaps he could refer to those two things.

MR. SPEAKER: May the hon. minister conclude the debate?

HON. MEMBERS: Agreed.

MR. HYNDMAN: Mr. Speaker, with regard to the unfunded liability issue, the hon. member is correct in noting that that was one of the reasons why, in Bill 37, which was proposed and passed in the Legislature in the spring, there were increases of one-quarter of 1 percent a year in contributions by employees and the employer over five years. That was done by reason of the statements and notations of the Auditor General in three successive years, wherein he noted that the current contributions were not sufficient to pay for current costs. The large shortfall with respect to the liability, which he noted in the rough sum of some \$4 billion — three-quarters of that — was found in two pension plans, the public service pension plan and the local authorities pension plan.

The move made in the spring, which is incorporated in Bill 77, will begin to narrow that unfunded liability, but there's no further increase or change in those contributions in Bill 77. I will endeavour to get further information as to numbers, if those are available, for committee stage. But it will begin to redress the balance of the shortfall in having current contributions meet current costs. There will still be a shortfall, of course, because the original pension fund of \$1.1 billion established a few years ago was not sufficient at that time to totally cover the potential contingent liability of the fund, although it is still unique in Canada and has now grown to a figure higher than that by reason of the income derived. I'll attempt to get further information on that.

As was mentioned, there's been no consultation with the Alberta Teachers' Association because the Teacher's Retirement Fund is now the subject of discussion between my colleague the Minister of Education, the Teachers' Retirement Fund trustees, and the Alberta Teachers' Association. I understand they are running roughly parallel to the review and updating of this Act. The consultation has been generally with pensioners, but also with the member on the Public Service Board from the Alberta Union of Provincial Employees. He and that entity have written and suggested a number of changes. A large number of them have been implemented in the legislation, some have not, and others have been in part.

With respect to the changes, some of them are a very minor detail. They exceed 50 in number. When the Bill was introduced, every exact change in each section was sent to the member on the pension board who made the original suggestions for change. In committee I'd be happy to go over those and provide further detail for the Assembly.

[Motion carried; Bill 77 read a second time]

Bill 87

Public Service Management Pension Plan Act

MR. HYNDMAN: Mr. Speaker, I move second reading of Bill No. 87, the Public Service Management Pension Plan Act.

In its main elements this pension Bill parallels the contents of Bill 57, which I mentioned was introduced in the spring, and Bill [77], which we have just discussed. There are some changes, of course, because they reflect the history and uniqueness of this plan as opposed to the public service pension plan and the other pension plans. Each one of the six is somewhat different.

This Bill, though, again maintains all the existing benefits under the plan that have been there. It does not provide for any increase in the contributions of either the employer or the employee, for the reason that the Auditor General identified not this plan but two other plans which I have mentioned, the public service plan and the local authorities plan, as the ones which contributed in largest measure to the liability problem and to the disparity between current costs and current contributions. I believe further actuarial reports on all these plans will be forthcoming within the next six to eight months, and then, on the basis of probably new assumptions, we will be able to see the degree of the liability.

The government guarantee is again continued. The separate pension board is continued. The traditional quasi-judicial powers of the management pension board are continued, appeal matters are clarified, and pension policy, as in the other Acts, will continue to be handled by the Legislature and by Executive Council, with administration by and through the minister responsible, the Provincial Treasurer.

[Motion carried; Bill 87 read a second time]

Bill 72

**Alberta Mortgage and Housing Corporation
Amendment Act, 1984**

MR. SHABEN: Mr. Speaker, I move second reading of Bill No. 72, the Alberta Mortgage and Housing Corporation Amendment Act, 1984.

This is a straightforward amendment. Within the present legislation there are certain statutory appointments to the board of the Alberta Mortgage and Housing Corporation, including such appointees as the president of the corporation, the Deputy Minister of Housing, and the Deputy Provincial Treasurer. Recently the structure of the senior administration in the Department of the Provincial Treasurer was changed, providing for two deputy ministers. That necessitated a change in the legislation governing statutory appointments. So it provides for the Provincial Treasurer to name an appointee to serve on the board of the Alberta Mortgage and Housing Corporation.

I request that members of the Assembly support second reading of Bill No. 72.

[Motion carried; Bill 72 read a second time]

Bill 76

Utilities Statutes Amendment Act, 1984

MR. McPHERSON: Mr. Speaker, I move second reading of Bill 76, the Utilities Statutes Amendment Act, 1984.

In addressing the principles of Bill 76, hon. members will know that the two Bills to which amendments apply, the Gas Utilities Act and the Public Utilities Board Act, are intended to regulate the owners of gas utilities and public utilities respectively. In the existing Acts the definitions of "gas utility" and "public utility" are very broadly worded and include any party having an interest in a gas well or oil well, a gathering system, or indeed a shareholder in such an entity. These parties are referred to as "technical owners"; that is, parties who technically fall within the definition of an owner of a gas utility or a public utility, but really are not true utilities in that they don't deliver gas or oil to the consuming public of Alberta.

Mr. Speaker, it's clear that the Public Utilities Board Act and the [Gas] Utilities Act contain many restrictions which are necessary to regulate the true utilities, but may well serve to impinge or provide no useful purpose in the case of technical utilities. I think it would be helpful to enter into debate an example of the restrictions that capture both public utilities and technical utilities. I refer hon. members to section 25(1)(h) of Bill 76, which states:

No owner of a gas utility shall . . .

- (h) without the approval of the Board,
 - (i) sell, lease, mortgage, or otherwise dispose of or encumber its property, franchises, privileges or rights, or any part thereof, or
 - (ii) merge or consolidate its property, franchises, privileges or rights, or any part thereof, with that of any other owner of a gas utility or public utility within the meaning of the Public Utilities Board Act, and every sale, lease, mortgage, disposition, encumbrance, merger or consolidation made in contravention of this clause is void and of no effect . . .

Mr. Speaker, the key word is "void", and I will come back to that in my remarks. Section 9(1)(h) of the Public Utilities Board Act contains virtually identical provisions applying to public utilities.

Mr. Speaker, I think it's clear that these restrictions could represent a considerable burden on the so-called technical owner, who may simply be a stakeholder or a small shareholder in an oil play, that kind of thing. As it is now, restrictions for technical owners can be waived by an exempting order or by approval of the the Public Utilities Board. In fact since 1974 there has been a steady increase in the number of exempting orders by the Public Utilities Board. But frankly — although I'm not positively certain — I suggest there would be a considerable amount of red tape involved in providing those exempting orders.

Needless to say, however, since 1974 there have been a number of transactions described in the articles I've just enumerated that have in fact taken place without proper compliance with the respective Acts. Mr. Speaker, even today there are a number of parties to whom the legislation applies that are unaware of the potential application of the Acts to "technical owners", and a number of transactions have been conducted without the necessary approval or with the exemption of the Public Utilities Board.

So we can see from the provisions of section 25(1) that the consequences of failing to obtain an approval or an exempting order from the PUB are severe, because the transaction in question is clearly stated in this section to be void. Moreover, neither the Public Utilities Board Act nor the Gas Utilities Act permit the board to subsequently ratify these transactions.

Mr. Speaker, the application of the Acts can operate a hardship on these technical owners by voiding certain transactions which really do not affect the delivery of gas to consumers in the province of Alberta. I think an example would be worthy of entering into the debate. In failing to obtain the necessary board order to get a loan obtained from a technical owner, which was secured by a mortgage, as an example, if no exemption was provided by the Public Utilities Board, that security could potentially be void. I think it illustrates the problem, Mr. Speaker. The legislation was intended to protect the public who consumes the products regulated under the two Acts, but not to help or to hinder parties who have purchased properties or advanced funds as technical utilities.

So what is the solution? Mr. Speaker, the solution is found in Bill 76, which will provide that the Lieutenant Governor in Council will designate the owners of public utilities, in which case all designated utilities will comply with the restrictions of the Act as they exist under the Public Utilities Board Act and the public utilities Act. This would apply to both Acts, as I have mentioned.

Mr. Speaker, there is also a retroactive remedy involved, because unless a public utility is designated in the regulations, any transaction that was entered into would retroactively be considered in force at the time of that transaction. Section 26 is amended in order to include all companies designated by the Lieutenant Governor in Council. Finally, there are some minor amendments that enable the Lieutenant Governor in Council to appoint a vice-chairman of the board and to give the chairman the right to designate a board member to preside over a board meeting or a division of the board.

Mr. Speaker, Bill 76 is basically a deregulatory Bill. It will help to untangle the business activities of technical utilities through deregulation. Because of that, I strongly commend its passage in second reading to hon. members of the Legislature.

[Motion carried; Bill 76 read a second time]

Bill 84
Wildlife Act

MR. SPARROW: Mr. Speaker, it is my pleasure this evening to move second reading of Bill No. 84, the Wildlife Act.

This particular legislation has been a long time in coming. Although a consensus could not be reached on all items, basically two matters will be further addressed in public review. The process to date has been quite lengthy, and in fact it started with the approval by this government of the fish and wildlife policy in 1982. I think it's a first in Canada for a province like ours to set goals and objectives for the management of their wildlife resources.

My predecessor, Mr. Bud Miller, has to be congratulated and commended for the excellent work he did in starting this process. He definitely left good direction for my staff and I to follow through on that very effective policy. Thank you very much, Bud.

Within the fish and wildlife policy, it reflects the need for new legislation dealing with the management of our wildlife resources. To that end, the government set out to rewrite the current Act. A number of principles were carefully followed in that preparation. Those key principles were as follows: wildlife legislation will reflect the minimum infringement of individual freedom of choice for the licensed user, the role of government will be restricted to those things which can be achieved only through government, regulatory controls will be applied so that optimum uses of wildlife are not severely impaired, and the management of wildlife will be promoted on the basis of fundamental ecological, principles.

From that, extensive consultation with the public took place. You will all remember that in the fall of 1983 we instituted a discussion paper. We received a massive amount of public participation from that discussion paper throughout the winter, spring, and summer and were able to come to a consensus of opinion on most major issues through our advisory council and through our caucus committees.

I should indicate that concerns were raised in primarily two areas, and virtually full support or consensus was received on the balance of items. Those two-areas of concern were game ranching and access to public and private land. I would like to return to those two issues later in my talk and address them more fully. But I think it's important to point out the main consensus items that have been instituted in the Act and will follow into the regulations. I'd like to list nine of them. The first is a definition of "wildlife". The present definition was far too broad and included many animals which the government had no interest in regulating. The major initiative here is to define animals in several categories for management purposes.

Number two is the issue of trust funds. In this case we have created a single trust fund to finance all the current programs through.

Number three is the licensing provisions. It is proposed that most licensing provisions be placed into regulation, which will allow for greater flexibility to accommodate such programs as mandatory hunter training for first-time hunters. The concept of transferability of licences is also contained within the Bill.

The fourth main principle is land management. This Bill provides for the designation of specific areas of land for wildlife and habitat protection through order in council. Activities within these areas will be managed with wildlife priority in mind.

The fifth major issue is the right of property in wildlife. Special provisions are in the Bill in order to transfer the ownership of wildlife. This concept is required if commercial uses

of wildlife are to be facilitated and to allow for the ownership of animals legally hunted to become the property of the hunter.

One of the major complaints we have taken over the years is the lowness of our penalties. We have re-addressed and designed this section to provide for more realistic monetary penalties and suspension to offences in all cases.

We have instituted a new section for rewards, and it is proposed that the new Act will provide for the authority to establish a reward program should it become desirable. Occasional offering of rewards for information leading to the apprehension of particular violators would increase the public awareness of its responsibilities in self-policing. Voluntary self-supervision will continue to be encouraged throughout the program.

Protection of hunters has been addressed. We presently have protection for trappers. This type of protection has been expanded to include protection for hunters. This was requested by the fish and game associations throughout the last months, and we were able to incorporate it into the Act.

I think one of the major issues really is captive wildlife. The fish and wildlife policy of 1982 provided that the Fish and Wildlife division would encourage and foster the development of domestic wildlife farming and game ranching, primarily on private land and Metis settlements. While accomplishing this goal requires very little modification to the present Act, development of the regulations would facilitate these industries. It became very evident that this is a definite deviation from existing philosophies of many Albertans. Wildlife farming is currently limited to operations that are more zoo-like in nature, and much discussion has taken place with reference to game ranching.

Mr. Speaker, those basically are the main themes of the Bill. However, I would like to address a number of other issues related to this legislation. Some concerns have been expressed lately that the government may be rushing through this legislation. I can assure you that for the last two years I have been involved in much discussion and considerable public input has taken place. A massive amount of paper has been received from the public to the policies.

With regard to public access, I have stated that we will be addressing public access in the future with a very comprehensive review of all legislation. We look forward to having public input on this in the future. We would like to congratulate all those people who have been involved in the user respect program. It's basically been doing a fairly good job of solving the access problem without legislation.

Mr. Speaker, I would like to end by thanking all those who have contributed to this very important legislation, and I ask for your support for the second reading of Bill 84.

MR. MARTIN: I won't be too long so the hon. member can get in.

Mr. Speaker, there are a couple of major concerns I would like to raise with the minister in second reading of the Bill, and perhaps he can think about them before we come back to Committee of Supply. First of all, it has to do with the part of the Act redefining plains bison as completely excluded from the wildlife category. As I understand the Bill, it treats them as domestic cattle, et cetera.

If I may, I would like to throw out a scenario of the wild plains bison, say, outside Wood Buffalo park. In my understanding of the Bill, if they were outside the park — and I'm told this happens often — under the new Act, they could be captured in any numbers and transported to other parts of the province; Perhaps the minister can tell us why this wouldn't happen. My major concern is that the soil in Wood Buffalo

park is contaminated with anthrax spores, and I'm told the herd there suffers from outbreaks every few years.

As I see it, Mr. Speaker, the problem is: if those bison were transported — and people are liable to do this — into other parts of the province, southern or central Alberta, is there not a danger of their carrying some sort of disease to other domestic cattle in other parts of the province? If this is not the case, if I'm not understanding that correctly — and I hope I'm not — I hope the minister will come back in closing debate and indicate this. But if I am, it seems to me we are playing with a bit of fire here, because we well know what can happen if they are carrying something to domestic cattle. They could be wiped out.

The other area I want to go into has to do with the game ranching. The minister is well aware that we had some discussion in the House a while ago about reindeer and the problems that was creating in southern Alberta. As I understand Bill 84, in a vague sort of way, it allows for game ranching. It's alluded to in sections 54 to 63, Mr. Speaker, but in a manner that makes it clear that regulation of game ranches will be entirely by ministry regulations and order in council.

Again I point out, if these game ranches are not watched very closely — and as I recall that was the problem with the reindeer — there is a potential for disease with domestic animals. I would suggest to the minister, Mr. Speaker, that it would be more appropriate if game ranching were managed by the Department of Agriculture. I wonder why this is not the case, because it seems to me this would be the department that should know what they're doing in terms of game ranching, the potential for diseases, and these sorts of things.

With those few remarks — I think they are important ones, Mr. Speaker, in terms of the principle of the Bill — I hope the minister can, in concluding debate, allay some fears that we have in looking at the Bill. If not, I guess we'll have to pick it up in Committee of the Whole to go into it in much more detail.

MR. HYLAND: Mr. Speaker, just making a few comments in relation to Bill 84, the Wildlife Act. The minister referred to extensive public input on the discussion paper that was out, and I know some people and organizations in the Fish & Game Association in my constituency made recommendations towards what they thought should be in the Bill. The minister covered the concerns that have been expressed by some people relating to the possible accusation of fast passage through the Legislature. I was wondering if there would be a possibility of public input, at least to the level of organizations such as Fish & Game and the advisory committee, on the regulations when they are ready to be implemented, so that members of these organizations can have input. To extend that, will members of the Legislature receive copies of these proposed regulations so they can have any input they wish?

The second part of my comments would be related to the idea of the regional directors in the department moving some of the power from the central office into the regions, as was the intention originally of decentralization in the department, so that these regional directors would have some flexibility with the regulations as they affect their area. If they have a game problem in their area, can they make a quick decision on that problem, with the possibility of having an advisory committee set up so they're not accused of doing it themselves, instead of having to get the minister's permission, order in council, et cetera, as it comes up the ladder? By that time the hunting season is over and it's too damn late to cure the problem anyway, so the owners have to put up with the animals.

I should make a comment, and I imagine it will continue with the new Act, on the method the department is now using in arriving at the hunting regulations, and the work that the Assistant Deputy Minister, Dennis Surrendi, has done to vastly improve the public relations of the department and in dealing with the organizations in developing those hunting regulations. They go out and bring the proposed regulations, in a draft form I would imagine, to the major organizations so they can look at those regulations, get back to their people in the regions, and suggest any changes that should be made. I was wondering if this would continue to happen.

MR. CLARK: Just a few words in support of the Bill. I believe the Wildlife Act has needed changing for quite a time and I certainly approve of what the minister is doing. I've had several requests from my area to have legislation that would permit game ranching. I would like to congratulate the minister for putting the legislation into place that permits game ranching under certain limitations. I also understand that the game ranch is for the production of meat, horns, and hides, and will be controlled to the extent that it would be entirely different and separate from the hunting of big-game animals.

Game ranching is an industry that has had a great deal of success in other countries in the world. In fact I believe it has grown to such an extent in New Zealand that it has become a fairly large export in that country. In fact I believe we import some of their products into Canada. Up until now our farmers have been unable to get into this industry. I would like to congratulate the minister on taking the initiative to put these things into effect.

Thank you, Mr. Speaker.

MR. FISCHER: I too would like to commend the Minister of Public Lands and Wildlife for his introduction of the new Wildlife Act. I know that your department has spent many hours preparing this Bill. I know this because of the number of times that you run parts of this Bill past our agriculture committee.

I have some of the same concerns as the Member for Cypress. Some of our fish and game associations feel that with the speed this Bill is going through the House, they will not have an opportunity to get some input to it. I would like to ask the minister, will this Bill be proclaimed at the end of the session? My fish and game associations have just received a copy of their discussion paper on the game ranching, and of course with the speedy mail service we have, they feel that they wouldn't have an opportunity to get any input back here before the Bill is proclaimed and through.

Thank you.

MR. PLANCHE: I'd like to make just one brief comment. Every once in a while I get the urge to comment when the minister of wildlife is in estimates or in second readings. I used to be an inveterate bird hunter before I got involved in this business. I want to commend him for his thoughtfulness in attempting to secure cover for upland birds, for this and his predecessor's efforts in Brooks.

However, I do have one concern. Perhaps when we get to committee, the minister will be kind enough to respond. There was a time when sharp-tailed grouse covered the whole of the shortgrass country. You could go to Hemaruka or Empress or Acadia Valley and they were in abundance. They're now almost a rare species. You hardly ever see them. When a covey is spotted, the hunters just dog it until there's nothing left. I wonder if the minister would consider or get some kind of considered opinion from his officials as to whether or not it might be suitable to close the season on those for two or three

years and see if we couldn't pick them up on a new cycle and perhaps have them again as plentiful game birds for the hunters in Alberta.

MR. STILES: I'd like to congratulate the present Associate Minister of Public Lands and Wildlife and the former associate minister for the manner in which they brought this important legislation forward. I'm referring to the opportunity for public input that was provided at all stages, beginning with the fish and wildlife policy that was introduced in 1982 and thoroughly discussed in the province, and leading up to the introduction of the discussion paper in 1983 and the development of a new Act.

There are many features in the Act and they've certainly been covered by previous speakers. I don't want to go on to any great length, but I really feel I should make mention of two points. I notice in this new Bill the introduction of additional provisions to control the use of firearms on roadways, which will certainly be welcomed by individuals in Olds-Didsbury constituency. As some members may remember, this was a subject of substantial controversy last year. The development of the western parts of our province, getting up close to the forestry, has been going on for the last 20 years. A lot of land that was previously wildlife habitat has been converted to farmland, and of course the result is that there is an opportunity for hunting in those areas. A lot of the game has stayed in those areas and attracts the hunters, but unfortunately, because of the development of the farmland and roads and a transportation structure in those areas, a lot of the hunters don't hunt the way they should. Unfortunately they patrol the roads with guns at the ready and are prepared at all times to jump out and fire away without any concern whatever for the people or the livestock that live in the area. It was creating a problem for us in those areas, and I certainly welcome the introduction by the minister's department of more control to deal with this problem.

The other point I wanted to mention was the matter of game ranching, Mr. Speaker, which has been touched on by one or two other hon. members this evening. The hon. Member for Drumheller, for example, mentioned the New Zealand experience, which certainly has been very successful. It's my understanding that there's some suggestion now that New Zealand will be requesting permission to import venison into Canada and compete with the products of our agricultural sector, in the marketplace here. Certainly I think it's time we had a very serious look at game ranching. If we have the habitat here — and obviously this is a natural environment for these animals — certainly this is where game ranching should or could be undertaken.

I'd like to point out to the associate minister, however, that many people concerned about game ranching don't really understand what is involved. They're expressing concerns with respect to how this will be done and what it really means. I think it's extremely important that the associate minister make it very clear exactly what is meant by game ranching and in particular that it will not mean the establishment of private hunting preserves in the province. That seems to be the major concern with many people, and I think it's very important to get that message out very clearly. We are not intending to create a bunch of private hunting preserves. I don't think there's any question about the potential for our agricultural sector to be involved and certainly to make it a very profitable enterprise within the agricultural industry, but I think it's extremely important that we make it very clear exactly what's meant by game ranching.

MR. SPEAKER: May the hon. minister conclude the debate?

HON. MEMBERS: Agreed.

MR. SPARROW: I'd like to address the concerns of the Member for Edmonton Norwood. I can assure the honoured member that we have considered the aspect of health within the parks and also the health and the problem of diseased animals on game ranches. It is our intention to have game ranching controlled and regulated through the Department of Agriculture. They have been involved in the process of designing the discussion paper, which was tabled in the Legislature some days ago, and will have definite input to following through with regulations, if that is the desire as future months progress. We anticipate that discussion paper bringing forward a fair amount of public discussion.

I think several members have mentioned game ranching, Mr. Speaker, and I may as well just address it once. I'm sure the Member for Olds-Didsbury really brought it to a head when he said people were concerned with private hunting preserves. That was one of the reasons we made a prohibition in the Act that no hunting would take place, specifically on game ranches. The second biggest concern we had through our discussions was the aspect of game ranches being on public land, so we added a prohibition to that within the Act. I think the biggest problem we had with that is that very little information is dangerous. In our white paper last fall we did not lay out what game ranching meant. Everyone went off on a different tangent designing their own type of system, one looking at the Texas style, one looking at the Oklahoma style, the next one thinking about New Zealand, and the next person talking about what they do in Europe. I've learned a lesson: you've got to give a little more information out in discussion papers. I take full responsibility for all the discussion and confusion that took place. We hope we have addressed that fully, though, in our new discussion paper, and I'm looking forward to having your input on future discussions on that issue.

With reference to the Member for Cypress, the public input process has been extensive on all key issues to date. I will also be seeking input on the regulations, on the major concerns of game ranching, that I just mentioned. As we did last year, we will be seeking their input on hunting regulations through the fish and wildlife advisory council and through the board of directors of the Fish & Game Associations. Last year for the first time they had an opportunity to have input at the zone level, and we intend to follow that process through in other years. We may have a problem this year because of the massive numbers of regulations going through and being reviewed that we would have to do. It is my intention not to proclaim the Act until such time as the majority of those regulations have been reviewed this winter. It would be our intention to proclaim the Act in the spring, allowing for input on the regulations. I also assure the honoured member that if through doing those regulations we find we've missed and made errors and we need to bring the Wildlife Act back in next spring for adjustments or changes, you could urge me to do that. If we do run into adjustments that need to be made, we could bring it back next spring and make those changes.

I'd like to thank the Member for Drumheller for his words with reference to game ranching. I'm sure I've heard the same comments from many other ranchers. They are looking forward to the economic opportunity game ranching will provide for the province. New Zealand is a fantastic example of what can be done if an industry like this is allowed. Presently we are being faced with looking at allowing delivery of meat from other countries to Canada. The Department of Agriculture is in discussions right now, with deer meat coming in from New Zealand. It's out there and in the marketplace, and the oppor-

tunity should be considered to be given to our ranchers. The economics are very good, and it will be interesting to follow this process through over the next months.

I believe I've answered the Member for Wainwright's question with reference to the timing of the proclamation. Very definitely, within the next couple of days I will be meeting with the fish and wildlife advisory council, going over the Act prior to its final reading. I also have my staff working with a group and Ron Gladish from the board of directors of the Fish & Game Association, and they will be looking at the Act prior to the end of this week. So they definitely are having some further input on the Act prior to its finalization.

I'm sure the Member for Olds-Didsbury will look forward to a discussion on regulations with reference to the idea of more broadly covering the use of firearms on roadways. I would urge him to get involved in the committee discussion next spring. Anytime he can get Jack Campbell and his committee together, I'll definitely bring those regulations back to the caucus committees for their discussion.

I think I've basically covered most of the points, Mr. Speaker, and urge all members to support second reading of Bill 84.

[Motion carried; Bill 84 read a second time]

MR. CRAWFORD: Mr. Speaker, tomorrow the Assembly will have a shortened afternoon because of the meeting of the Commonwealth Parliamentary Association at about 5 o'clock.

What is proposed is second reading of Bill 82, which is expected to attract a considerable amount of interest among hon. members. In the event that it doesn't occupy all the time available, we will proceed with second reading of Bills 85 and 86 as well.

Mr. Speaker, I move that the Assembly now adjourn until tomorrow afternoon at 2:30.

[At 10:07 p.m., on motion, the House adjourned to Wednesday at 2:30 p.m.]

