

Legislative Assembly of Alberta

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Subcommittee D

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3:13 p.m.

[Chairman: Mr. Clegg]

Committee of Supply: Subcommittee D Science and Research

THE CHAIRMAN: Well, good afternoon everyone. It's good to be back in this room. When we met here Thursday, we used the same rules that we do in the House, but we didn't exactly use the same rules as the House because it was agreed upon last Thursday that people would just sit down rather than have to stand up. It went very well, I might add. So if that's agreeable now, that's exactly what we will do. If you want to be on the list, just raise your hand. There was a point of order or two, and I suggest you maybe stand then, because I don't really know whether you want to speak or have a point of order. The only time would be on a point of order. Otherwise just raise your hand and I'll try and get you in.

MR. COLLINGWOOD: Mr. Chairman, point of order then.

THE CHAIRMAN: Yes, hon. Member for Sherwood Park.

MR. COLLINGWOOD: Thank you. Mr. Chairman, arising from last Thursday, we did have, as you quite correctly pointed out, some discussion at the beginning of the meeting about the rules of procedure that we would be following. The understanding of all members of the House, as I understand it, is that the procedure that will take place in this room will be the same as the procedure that takes place if we were sitting in the Legislative Assembly of Alberta.

In that regard then, Mr. Chairman, I'm wondering if we can have stated for the record specifically what the rules are. For example, I understand that this morning in the committee there were no pages available, and there was movement back and forth between the legislative Chamber, as this part is, and the public gallery. Now, of course, that is strictly prohibited when we're in the Legislative Assembly of Alberta, and I'd like to know what the rules of procedure are for the movement of Members of the Legislative Assembly into the public gallery or members of the public gallery moving in front of the row behind my colleagues.

DR. L. TAYLOR: The Liberals are already doing it, Bruce.

MR. COLLINGWOOD: That's why I'm asking what the rules of procedure are, hon. member.

There is also a clear understanding when we are in Assembly of the communication and the movement that is allowed between the public gallery and the press gallery. Now, Mr. Chairman, I'm assuming that these meetings are open to the press, as are all meetings of the Committee of Supply, and I'm wondering what our rules are in terms of what will constitute the press gallery and what will constitute the public gallery. I think it's fair to all members of the Assembly that we know that.

Mr. Chairman, in terms of rules, we have had some mention of this point. Perhaps we need your direction for clarification. If hon. members come to this room and take a seat in the back row, they will be entitled to a microphone as we are in the Assembly. When we are in the Assembly in our own seats, we have electronic amplification and we do not move around that Assembly for purposes of addressing questions to the minister. The rule, as I understand it, that has been established in the Chamber is that you must rise in your place to speak, otherwise you will not be recognized by the chair. Does that same rule apply in this room, or do we have two sets of rules depending on where you are in terms of the estimates in Committee of Supply?

I raised the point with Parliamentary Counsel last Thursday, Mr. Chairman, and he agreed with me that in terms of recording the vote, the procedures and traditions of our Assembly are that we are entitled to division for the purposes of recording a vote. In order to have a division, you must have division bells. My question to the chairman is: do we now have, as was my request last Thursday, division bells arranged for this room at the start of this meeting? If we do not, I'm not sure that we can convene this meeting until that has taken place.

I would like some direction from the chair on when we will adjourn so that all members who are participating in this will have a clear understanding of what the rules are. Now, the Standing Orders, as you know, Mr. Chairman, have adjournment as part of the Standing Orders. We will normally adjourn at the normal adjournment hour. If that is to be different, we'd like to know that as well. Those are my comments.

MR. DAY: Well, as it's a point of order, I'll respond. I'm disappointed that there seems to be a lack of communication between the Opposition House Leader and members of the opposition, because these points have been gone over ad infinitum both verbally and in writing and recorded in *Hansard*. However, not wanting to assume that there's any deliberate attempt to stall these important proceedings, we'll try one more time. Tomorrow, if they want to do it again, we can try again and again and again.

AN HON. MEMBER: Answer the question.

MR. DAY: I have the floor, Mr. Chairman, and I listened carefully, and I ask other members to do so also.

As far as designated supply subcommittees, it's very clear both in practice and in Standing Orders that indeed the rules are somewhat different. In reference to this morning, because not all the rules apply in designated supply subcommittees as apply in estimates, there were some differences in the subcommittee this morning. For instance, it was duly noted that no Liberals were present for quite some time. In fact, that Chair could have moved to adjourn, but wanting to show deference to all members, the subcommittee waited and waited and waited until one straggled in and then another. I think that by 9 o'clock there were three here. So the proceedings proceeded, as has always been done.

However, when we're in the subcommittees it has been clearly said in writing and verbally that the same rules of Committee of Supply apply here. So if the member was even present or observant in the last set of subcommittees on Thursday, he would have noticed that there were notes that are passed from pages. There is not a handing of material back and forth to members on the other side of the cordoned-off area, but in fact very clear distinctions were made.

In terms of the microphones, first of all, there is nothing in Standing Orders at all, *Beauchesne*, Maingot, or any other foreign or nonforeign name that people want to cite, that guarantees the use of a microphone. However, our members being so concerned that all Liberal members be heard, should there be another time, as in this time, where there is a considerable loading-up – and we are very encouraged, I want to say, Mr. Chairman, very encouraged. This is the first time in many years that I have seen a half decent turnout of Liberals at supply committee estimates consideration. [interjections] I can see by the response that they are eager to express their jubilation.

Also, Mr. Chairman, I would say that our members, should there be any problems with microphones – and as I look around the room, even with most of the Liberals here around the table, I don't see anybody lacking a microphone, even though a

microphone is not guaranteed – are glad to vacate a seat where there is a microphone in front of them. As a matter of fact, our members will be glad to sit in these seats back here if some people have difficulty with being identified and stuck to a table, because we know that when we address remarks from this row of seats, they can easily be picked up by the microphones, but if there's any sensitivity to a person having their own magnifying device, we are more than ready to make that available. So I want to make that absolutely and very clear.

The subcommittee which met in this room on Thursday made a decision among themselves that it would be accommodated should members not want to rise and speak that they wouldn't have to. Now, this subcommittee, if they take some offence to that and would like to see members on their hind legs, then so be it. Certainly, we're prepared to do that.

In terms of a division, again Standing Orders are very clear on division. Within a subcommittee, there is not provision for division. Sorry for using what sounds like a rhyme. However, there is provision for a recorded vote, for a vote to be recorded. So when it comes near the end of this, adjournment time, if a number of members who are still upset about this highly effective process want to have a vote recorded on an adjournment motion, that is absolutely permissible within the Standing Orders. These are very clear.

Also, on the area of adjournment, I've made it clear in discussions with the Opposition House Leader. We even made accommodations. Judging from what we're learning in the meetings on Thursday, there was an adjournment motion somewhat before 5 o'clock to try and accommodate, as was usually done in the past, also a brief discussion on the appropriation Bill, which would be Bill 10. That resulted in some time being spent downstairs, and then as you recall, there was a division which took an extra 15 minutes or so of highly questionable time. Why that would have been called when we could have been discussing estimates, I'm not sure. But to try and accommodate the concern that the appropriation Bill on an afternoon was taking up the same time as estimates, I communicated very clearly to the Opposition House Leader last week and again today that that Bill will not be looked at this afternoon. We'll do that tonight. That will allow us to go to approximately 10 past 5 to have full discussion here, and some time around 10 past 5 look for an adjournment of the subcommittee, at which point we will all meet downstairs again in the full committee to look for an adjournment.

I thought these were communicated clearly, Mr. Chairman. I do realize that this process, although not being a new one, has not been used for a few years, so members are getting used to it again. If there's other clarification, feel free to have those questions entertained, and of course we look to you for any further ruling on this purported point of order.

3:23

MR. COLLINGWOOD: Thank you, Mr. Chairman. I appreciate the comments made by the hon. Government House Leader. I did pose a number of questions to the chair. Both I and the hon. Government House Leader spoke to that, and I'd like a ruling now on what the rules of procedure are.

THE CHAIRMAN: Well, thank you for the point of order, and the Government House Leader did certainly – he's not the one that makes a decision on a point of order.

I hope I don't forget anything. Firstly, on the notes being passed, they are only supposed to be passed by the pages to the Members of the Legislative Assembly. It's my understanding that this partition is for all members, and certainly all Members of the

Legislative Assembly can be in this House. I want to draw out the fact that only people on this list can in fact vote.

Secondly, on the time and then bells, there won't be any, because this is a subcommittee and rules are different. The only thing this committee can do is recommend something. In fact, if somebody wants a vote on something, we will have a vote. If somebody wants their names recorded, that will be done too. As far as bells ringing and that, this is only a subcommittee and rules are different in a subcommittee.

You mentioned the point of where you sit. Last Thursday we had all the names on the table, and one member said: well, I don't want to sit there; the names shouldn't be there. Again we want to be very flexible. For *Hansard's* sake, we certainly do want members to in fact be at a mike, because everything's in *Hansard* and it wouldn't be right if they didn't. So if anybody hasn't got a mike – I don't see anybody that hasn't – I'm sure that every member in this room will make way for another member to take their place.

Were there any other points? I hope I answered all the questions. I certainly don't want to prolong this.

Today we're here to talk about Alberta science and research, and I ask the hon. minister to make a few opening remarks.

MRS. MIROSH: Well, thank you, Mr. Chairman. It's nice to see so many people interested in science and research. It's overwhelming. It's an important topic, and it's important to Albertans. I also want to welcome my new critic, the Member for Edmonton-Manning. I'm prepared to help you in any way that I can as we move along with these estimates as well as into the year.

Mr. Chairman, the budget estimates for the department of science and research you'll find on page 357 through to page 372.

Just before I start with my comments with regards to the estimates, I'd like to take the opportunity to introduce the administration who've prepared this budget, and I think they should be acknowledged. I have here today Barbara Nyland from the ASRA secretariat, Dianne Stewart and Marilyn Johnston who are shared administrative staff through the Premier's office, also Duke du Plessis and Keith Salmon from the Alberta Research Council, and of course Mark Patton, who's my executive assistant. They're all here with us today. I don't think Karen Beliveau is here.

I really feel very sincere about science and research. It is a new ministry, only from September of 1994, during that year, through '95, last year. We introduced a Bill that was proclaimed in September of 1995. Mr. Chairman, I think I should add that there was a lot of input from the public prior to the legislation going through, and what we have introduced in the House in the past was certainly through an enormous amount of consultation.

One area that I would like to remind members about is that this is a knowledge-based industry. It's as important as energy. It's as important as agriculture. It's as important as any other department in this government, and it is moving up to be one of the top industries not only in Alberta but in Canada and on a global basis, and we are competing on a global basis. One of the primary responsibilities of this government is to establish a strategy and develop a strategy that will maximize this province's research investment.

There are numerous components to this strategy, and I'd like to take a moment to outline a few of them. As you know, we are required by legislation to conduct an annual review and evaluation of all government science and research activities, and this review was carried out by the ASRA board of management in conjunction with the appropriate officials from the department or agencies

under review and the ASRA secretary.

Just to remind members who might not be familiar with the ASRA board of management. It is made up of private-sector individuals, individuals from the universities of Calgary, Edmonton, and Lethbridge. This board also has two new members: the chair of the energy research board as well as the chair of the agricultural research board. We have what I feel is a dynamic group of people who are helping develop our priorities.

This board of management has reviewed each department budget that spends money with regards to research. Every single department has been scrutinized by this board of management. The objective of this review is to ensure that our research expenditures are well planned, effective, and support the general economic and social goals of the government. Again, I'd like to emphasize that ASRA reviews all ministry research budgets, because that's the only way that we can establish co-ordinated research and develop a strategy. In the past, we have been working in stovepipe environments, where everybody protects their own little budget in research, and there haven't been any measurements of outcome or any examination as to how those research dollars have been spent. Many of those dollars had been given in the form of grants and in the form of who comes first. That's the way money was distributed.

Research is funded by the ministries of Energy, primarily, Economic Development and Tourism, environment, agriculture, Health, and to a lesser degree some of the other departments. The research authority ensures that the government's research investments provide measurable benefits for all Albertans.

3:33

In developing research and strategy, it is of the utmost importance to solicit the advice and the input of stakeholders. ASRA is just in the midst, again, of setting their priorities, and they are consulting with industry on the external portion. Internally there is a group of employees who are members of each of the departments that I've just mentioned, and that particular group is TRAC, which is the scientific and technical research group. They have produced this book for 1995 and 1996, and they will be publishing another one in September to update this book. What we learned through TRAC, who again is administration through all of the departments, chaired by Dr. Fessenden – they have actually been very astute in measuring exactly what was science and research. We had a budget in the past of what we thought was over \$200 million for scientific-related activities, but through the year we have actually identified specifics as to the areas of research and development. I'd be happy to share this book with you. We have other copies for members who are interested in this book as well. I use it as much as a bible as the estimates. I will be referring to this book, and we'll make sure that you get a copy.

The consultation that ASRA is planning will answer key questions that must be asked in order for us to prioritize our investment in science and research and to maximize our return on these investments. We have to know what these potential benefits are and what their commercial value is before we either partner or fund any specific project and what the size of the potential market in Canada and overseas would be and what spillover benefits other industries would have and develop and who our competitors are. These are the kinds of questions that need to be answered in order for ASRA to make informed, educated decisions regarding an extremely important resource.

Central to a successful research and development strategy – it is important for us to set up an effective communications system, and ASRA will be undertaking a communications initiative that

will serve a variety of purposes. They will seek to increase the recognition of Alberta within the global community as a science and technology leader and reinforce that message through our province and try and place R and D investments.

We'll also work to ensure that Albertans have a better understanding of the importance of science and research by communicating our successes and achievements. I'd like to mention at this time that we are working with Access Network on airing a series on the Alberta advantage. In March there'll be numerous episodes which will focus on the value and the importance of science and research, and we will make sure that all members are aware of those dates. I encourage you here today to watch the series, which is so valuable and timely for information with regards to science and research.

We'll also be continuing our efforts to develop a strong biotechnology industry in Alberta. ASRA completed a report entitled *The Commercialization of Biotechnology in Alberta*, and this was circulated in the House, and now we're developing the implementation plan in conjunction with external stakeholders.

ASRA has already been meeting with numerous groups and individuals from the various chambers, the Calgary chamber and the Edmonton chamber, and the Alberta Bar Association and advanced education institutes. The universities have played a major role in ASRA in making sure that our research and science is top-notch. We also collaborate and have a partnership with the federal government and industry in order to promote and enhance Alberta's biotechnology sector.

Another area of focus for ASRA will be to enhance Alberta as a global leader, particularly in medicine. We are seeing health as an industry, and I have set up a task force now. We are working with all the boards in Alberta, particularly with the Edmonton and Calgary regional authorities as well as the deans of medicine, top scientific research people in cancer research as well as – well, I would just say all the top players. We are putting together a strategy so that we can make Alberta number one in health research in all of Canada, and we're certainly under way with the kinds of dollars that we are investing through the Alberta Heritage Foundation for Medical Research. There has been over \$350 million, as many of you know, set aside for medical research, and those dollars are now producing for every dollar we spent an \$8 leverage. The Medical Research Council, as well, contributes on a federal basis 20 percent of their budget to health research. We're working with fund-raising groups in both Edmonton and Calgary, and we're continuing to do that. I would hope that all members here would help us to have input into making us the number one leader.

Our universities. Again, the Alberta Heritage Foundation for Medical Research, the Alberta Cancer Board, and the Institute of Pharmaco-economics as well have played a major role. We are seeing, Mr. Chairman, people coming from across this country now in the biotechnology and pharmaceutical areas to invest money. I feel so proud that we have opened up the doors because of the strategies that we've developed through economic development, health, and other areas to be able to see Pharmaco-economics develop as they have. There are seven major players and industry contributing to this partnering with the universities. We are building an excellent foundation, and ASRA again is working closely with the academics, because we also want to see not only just health excellence but excellence throughout.

I might just remind my colleagues that it's only a year ago, maybe not even a year, that Alberta received \$20 million through the national excellence awards in forestry, and that was primarily led by private-sector Al-Pac. It's a partnership between the private sector, the university, and the province. We feel very

proud of that.

ASRA has divided into several task groups, and we have people from the community who are knowledgeable in the area of information technology and telecommunication infrastructure. We completed a report by Dr. Marshall Williams, and the purpose of that report was to provide advice to the Alberta government on its approach to information technology and telecommunications. Based on this report, the recommendations, the government did appoint a chief information officer to address concerns expressed in this report. This report has been released and available through our ASRA website. I would also like to remind members that if you do have a computer, please access the website. We are the second government department to have a website, and we're very proud of it.

We also have a report on scholarly activity in the postsecondary system which was initiated initially by the Premier's Council on Science and Technology. This report was prepared by Dr. O'Shea, and the report addressed the needs of a research policy in Alberta for postsecondary systems.

I've already mentioned the commercialization of biotechnology.

We are working with Energy and identifying areas of funding to strengthen the energy sector, and we are also working with initiatives in developing commercialization of all technology.

Of course, as all of you know, Dr. Lorne Taylor is the chair of the Alberta Research Council. Again, happy birthday: 75 years.

AN HON. MEMBER: He's 75 years old now?

MRS. MIROSH: Yes, he's 75 years old. [interjections] Because of the 75th birthday of the Alberta Research Council we have these *Newslines* that are always available for members who want to catch up on what the Alberta Research Council is doing and a booklet on technology for business that is separate from the one that I had distributed in the House earlier.

I will stop there and allow the Member for Cypress-Medicine Hat to bring some comments to the table with regards to the Alberta Research Council.

3:43

DR. L. TAYLOR: Thank you, Madam Minister. It's my pleasure to be here to talk a little bit about the Alberta Research Council today, Mr. Chairman and members. I think many of you members from both sides of the House have had the opportunity to visit the council and see some of the good work they're doing. They're doing some really exciting things over there, and I'll just talk about it for a little bit today.

We have two senior executives of the Alberta Research Council here with us today in the members' gallery. They are Dr. Duke du Plessis, the vice-president of research and development operations, and Mr. Keith Salmon, ARC's chief financial officer. As I say, they're sitting directly behind us in the members' gallery. [interjection] That's right. These people are well versed in the operations of ARC.

The ARC has many valued customers and partners, and the ARC will advance the economy of the province. I want to talk today a little bit about how ARC advances the economy of the province. It does this by promoting technology, research, development, and applications. It also performs applied research. ARC is recognized around the world today as an innovative technology corporation. It is recognized right around the world as a valuable business partner to the private sector. This is indicated by the fact that we did business last year in 21 countries. Twenty-one countries around the world are familiar with ARC's experience . . .

MS CALAHASEN: How many?

DR. L. TAYLOR: Twenty-one, and this will grow yearly.

We're looking at a new operation in India. In fact, the former president of ARC, Dr. Brian Barge, was in India just a short time ago to sign a memorandum of understanding which will foster relationships within his energy industry and help open the doors for Alberta's companies wanting to do business in India. There's a huge opportunity for Alberta companies today in India in the heavy oil field because of the respect that ARC has with its research around the world.

Not only do we do business in 21 countries, but 28 percent of – excuse me.

MR. LUND: Tough to swallow, eh?

DR. L. TAYLOR: No, it's not tough to swallow, hon. minister. Maybe for you, hearing these good, exciting facts. It's certainly not for the rest of the members, I'm sure.

Twenty-eight percent of ARC's revenues come from international sources. I think that's a substantial amount, and that will continue to grow as ARC expands and does business in other areas of the world.

So you can see that ARC's business is to advance the economy of Alberta. It does that by stimulating private-sector growth. It does that through working with the private sector in research and development and through partnerships, joint ventures if you might. It brings technology developments to commercialization, brings technology benefits to Albertans. ARC is widely recognized for this.

For instance, it's widely recognized in the area of biotechnology. Just one brief example, if I might. You're all familiar with hamburger disease and the troubles that can cause, especially for young people over the summertime. In fact, recently there was a case in the U.S. – I think Jack in the Box restaurants – that had a severe problem with hamburger disease in their restaurants in the chains in the U.S. You've heard recently that in this past summer there were a number of cases in Alberta of hamburger disease. Well, we have spun a company out of ARC which I believe has the cure to hamburger disease. They did first-stage clinical trials a year ago; they did the second phase of clinical trials this year. We have now a Calgary-based biotechnology company called Synsorb Biotech that trades on the stock market, that can, if your child gets sick, cure hamburger disease. That's a direct result of ARC being involved in commercializing research and spinning companies out of the ARC.

You know, some people despair when we lose some of our good scientists and they spin out into the private sector, but I don't. I always tell folks that that's the way we need to be. We need to be getting these people with their good research out in the private sector where they can commercialize it, because it does two things. It gets some company out in the private sector that can create jobs and wealth for Albertans, and it also creates new openings in the ARC so that the staff, the scientists in the ARC will never stagnate, because they're spinning their companies out and new people with creative new ideas come into the ARC. So that's one area, biotechnology.

Another core area for the ARC is information technologies, and we have a very good group in Calgary working on that. We also have two other areas, manufacturing and natural resources. In fact, an example of natural resources is the relocation of CAN-MET to the ARC facility. This is a joint venture with the federal government, and I can assure you that any time the federal Liberal government recognizes something in Alberta by transferring

scientists and dollars to an organization here, you can be sure that organization has to be at the top of their level in the world. The ARC in terms of heavy oil technology is developing technology which will substantially reduce the price of extracting oil from the oil sands. We have in northern Alberta a field that has not even been touched yet but apparently has greater reserves than Saudi Arabia, but we need to get the price of the technology down.

Now, I haven't checked on this recently, but I believe that we can probably reduce over the next three to five years the price of oil coming out of those sands by about \$3 a barrel. If we can do that, it is then economically viable. Now, you can imagine the development that can happen in Alberta with a field that size, larger than the resources of Saudi Arabia, and this is what the feds have recognized.

MS LEIBOVICI: A point of order.

THE CHAIRMAN: The hon. Member for Edmonton-Meadowlark.

MS LEIBOVICI: Yes. Could the hon. chair tell us how much time is remaining in the 20 minutes that the minister and chair of the ARC have? I'm just short on my time here. I'd like to know if the 20 minutes is up yet.

THE CHAIRMAN: Every member has 20 minutes.

MS LEIBOVICI: Well, excuse me, but this member is part of the government; we alternate. Generally what happens is that the minister's time is divided between those of the chair. So it's 20 minutes total for the minister to kick off, including the time that he or she wishes to give to the chair; then it reverts to a member of the opposition.

THE CHAIRMAN: If you can show me any orders that – the chair calls who speaks. I want to assure the hon. Member for Edmonton-Meadowlark that the opposition will have a fair amount of speakers.

MS LEIBOVICI: No, Mr. Chairman.

AN HON. MEMBER: It's Standing Order 62, isn't it?

MR. BRUSEKER: It has been the convention in the past, when we've done this before, that the minister and the member responsible for the Alberta Research Council together make an opening statement, combining their total, reaching the accepted total now of 20 minutes, and then it passes on.

THE CHAIRMAN: Certainly there's no written rule that that has to happen, Calgary-North West, but let me assure you that we will even this up. In most cases that's what happens, but there are no orders that said that this has to happen. I'm sure the hon. Member for Cypress-Medicine Hat will continue and make his good remarks, and then we will certainly even this out.

DR. L. TAYLOR: Yes, and I'll certainly be brief. I'll certainly assure them that I will be brief, Mr. Chairman, but I think it's a case here of these people afraid to hear the good news. You know, I'm bringing some good-news stories, and they quite frankly want to run around with their Chicken Little attitude that the sky is falling all the time. There is good news. There are good things happening in Alberta. The Alberta Research Council is one of those good-news promoters with lots of good-news

stories, and I think it's important that these nabobs of negativism have the opportunity to hear some of this good news. So I will continue but certainly will be brief.

MR. LUND: Please continue.

3:53

DR. L. TAYLOR: Thank you. The minister has urged me to continue.

There are some other areas where the ARC does have good news, Mr. Chairman. I could go on. I've got a list of companies here, if the members would like to see them. I'll just summarize them briefly and point out the total wealth created, total jobs. I have that information here. Just from seven companies that we worked with in the last year, there were 97 new jobs. I was going to talk a little bit about them, but if anybody would like that information, I will provide it to you.

Another quick mention of the natural resource areas, the development of oriented strandboards developed out of ARC. Very briefly, all of you have seen them in new construction going up. Instead of using plywood, they all use that OSB. That's a direct development of ARC. You can imagine how many jobs and the economic benefit of that not just to Alberta but to all of Canada and the U.S. Another brief example would be Gienow Windows in Calgary, where ARC went in and helped them revitalize their manufacturing technologies.

MR. N. TAYLOR: Put glass in the middle parts.

DR. L. TAYLOR: Put glass in the middle parts, and Gienow is now probably the most competitive window manufacturer in Canada and one of the most competitive in North America. It's so competitive that it does a lot of export business into the Asian market. So, you know, there are lots of exciting things happening, Mr. Chairman, at ARC.

Of course, one of the important issues with an organization like this is the performance measures, and we do keep track of this. We did have a company called Doyle Tech, an independent company, come in and discuss it with ARC and come up with a program as to how we could actually measure our performance. [interjections]

THE CHAIRMAN: Order.

MS LEIBOVICI: We have no order in these committees; it's unfortunate, Mr. Chairman. [interjections] But obviously you were showing a complete lack of respect toward what we had agreed to in the Legislative Assembly.

THE CHAIRMAN: Hon. Member for Cypress-Medicine Hat, continue on. We don't need those outbreaks.

DR. L. TAYLOR: Thank you. I'll just very briefly mention the performance measures we're looking at. We look at wealth creation, we look at sales stimulation, we look at job creation, we look at R and D funding by the private sector, and we look at the core grant from the government. I think it's important to recognize that the core grant of the government is shrinking substantially. At the same time, the private sector is increasing their investment in ARC, and by 1998-99 we will have \$19 million a year coming in from the private sector. I think when the private sector is prepared to invest in something, that should say something to every member here. They're saying that it's valuable. They're saying: "We're prepared to work with that

organization. They're doing the right things at the right time. They're the leaders."

MR. N. TAYLOR: They're getting a free ride; that's why.

DR. L. TAYLOR: Quite frankly, there are no free rides, Mr. Chairman, as the Member for Redwater or wherever has suggested. Fortunately, I understand he's not going to be with us much longer.

We'll continue on. [interjections]

THE CHAIRMAN: Order. Hon. Member for Cypress-Medicine Hat, we don't need a résumé of everybody. Just finish your remarks, please.

DR. L. TAYLOR: Thank you. I apologize for that brief résumé of the Member for Redwater.

As I was saying, there are no free rides, Mr. Chairman. We do joint ventures, we commercialize technology, and that's the name of the game. We see that private-sector investment in ARC has achieved results. We see that private-sector investment in ARC has made it a strongly recognized company around the world. It has a leadership role and will continue to play a leadership role in forming alliances and consortia within the private sector.

Now, as I said, Mr. Chairman, I could go on for a considerable length of time about this, but some of the members seem to want to ask some questions in this area, so I'll conclude at this time and be open for their questions.

THE CHAIRMAN: Thank you.

Hon. Member for Edmonton-Manning.

MR. SEKULIC: Thank you, Mr. Chairman. First I want to make two comments. One is that I, by my critic portfolio requirements, sit on two committees, that being the A and D committees. They meet concurrently, so after I make my comments, you'll have to excuse me. It's not for lack of interest; it's because I have to tend to the other business currently occurring in the Chamber. The unfortunate part there is that I can't vote. Despite being on both committees, I can't vote in them.

That aside, I do want to agree with the minister's opening comments that knowledge-based industry is the growth not just in Alberta but internationally, and certainly as the member responsible for the portfolio as critic I would say that my colleagues fully endorse that sentiment. In fact that's why I came forward with a Bill in the Legislature, Bill 204, which addresses some of the concerns that we have with information traveling, with technology being enhanced.

In making some specific questions, I guess the second comment that I have to you, Mr. Chairman, is: this morning the procedure was that I could ask the minister a question, and in that case he responded, and then I could go with a line of questioning. It was four or five questions, and it was just more like – I won't call it free-wheeling, but that would permit completion of a thought. Is that also the case now?

THE CHAIRMAN: No. You were in a designated committee this morning, and this isn't.

Hon. member, I'm sure that the minister is taking down points. It's certainly my hope that you can ask the questions, and I hope we'll have the minister get back in to answer the questions. I'm hoping to get as many members as I can so that they can ask some questions, and then she can respond later.

MR. SEKULIC: Okay. The reason I pose that question is that I don't come with prepared notes, and my questions follow the responses. However, now under the new direction I will try to present all of my questioning, and then the minister can either take notes or review *Hansard*, and at some point I assume I will get responses.

One of the first questions that I have here is – I take a look at the Department of Economic Development and Tourism, whose estimates were before us this morning, and I then see the department of science and research, and I'm curious to see what consideration has been given to amalgamating the two departments. At minimum – and I know I raised this point before with the minister – that would save the taxpayer a quarter of a million dollars just in administrative costs within the ministry. I'm not sure that the function couldn't be delivered within the Department of Economic Development and Tourism, or, on the flip side of that, if it were chosen that science and research is the more appropriate place where we put such diversification interests, then we would save some of the administrative costs that are currently found in Economic Development and Tourism. So I would like to know what consideration if any has been given to that, and most importantly what were the arguments against amalgamating the two departments?

Secondly, following a similar train of thought, I see that we have the Alberta Economic Development Authority, which was brought in a year or two ago by the Legislature, and a year ago we brought in the Alberta Science and Research Authority through legislation. As I earlier said with regards to the two departments, I understand that there are overlaps in membership on those two authorities, and if that's the case, why do we have the two separate authorities? I'd like to be enlightened as to whether there is potential to amalgamate, once again just utilizing one set of administrative tools versus two entities, because they do in the end have to share a significant amount of information. They are going down the same path towards diversification through various interests.

The next question follows naturally from that. I note that the Alberta Science and Research Authority administrative budget went from \$334,000 to \$1,481,000. Earlier this morning when I asked the Minister of Economic Development and Tourism about the administrative costs pertaining to the Alberta Economic Development Authority, it was in the range, I believe, of around \$300,000. I'd like to know why an authority consisting of roughly 85 members costs \$300,000 in terms of administrative costs, yet this authority, which has significantly less members, costs 1 and a half million dollars. I'm just wondering if it perhaps is because the Minister of Economic Development and Tourism is an economist, and he's found economies of scale somewhere. Nonetheless, I'd like to know why we have this discrepancy between the two and whether, in fact, we could realize further cost savings by putting both authorities under the ministry of Economic Development and Tourism.

4:03

The next question I have follows along the lines of some of the comments that the Member for Cypress-Medicine Hat, also the Alberta Research Council chairman, made. In the event that we have technology that is developed through the assistance of either the public dollar or the facilities being offered in which these technologies can be developed, when those are successfully commercialized, the question I have is: does the general revenue fund realize any of the benefits? I look to that in terms of cost recovery. I'd fully endorse the government playing an active role in either facilitating or promoting technological advancement.

However, when these technologies, as they in many cases do, hit the jackpot, does the taxpayer see any benefits of the programming? Perhaps an explanation which would expand a little bit and perhaps citing specific examples where we have met cost recovery. I think that's basically all we should meet is cost recovery, because government shouldn't be in the business of business. However, it should be promoting industries and particularly this one.

The next question that I had pertains to page 364 of the 1996-97 estimates as they apply to science and research. The one that I'm interested in in particular – and I brought it up this morning with the Minister of Economic Development and Tourism – is the types of jobs that are being created in Alberta. I want to know more than a rough number, which often is brought into question, depending on who it's presented to. What I would like to see is more detailed statistical evidence of the nature of employment being generated by our assistance or promotion, both in science and research and in economic development and tourism. When I look at job creation, direct jobs, on page 364, I see some numbers there in terms of targets for the upcoming years, and I don't think they're unreasonable. What I'd like to see is some of the numbers that have been generated in the past and also an explanation.

I see there's an asterisk which states "direct jobs." Then below, the comment explaining that asterisk is: "There are estimated to be two indirect jobs created for every one direct job created." I'm just curious as to the source of that statement. It may very well be true; however, it could also be higher. I just want to know what the scientific approach to coming to that number has been, or is it just purely evidence-based, insofar as this is what the result has been, looking at the past three years? Some technologies, I would assume, would generate many more than two indirect to one direct.

So that, briefly and I hope accurately, puts the questions that I have at this time. I look forward to a response. I'm not sure when you will give it, Madam Minister. If it's not immediately, then I will go to the other subcommittee. Oh, it's going to go around the table, giving me time?

MR. DAY: No. We'll speak through the chair.

MR. SEKULIC: I'm sorry. This is technological advancement, where I have to send a message to the chair, who's on the other side, for the minister sitting next to me to get it. Nonetheless, those are my questions this time. If the minister's going to respond at this time, then I will remain here. If not, I will be going down to the next subcommittee to participate there.

THE CHAIRMAN: The hon. Member for Fort McMurray.

MR. GERMAIN: Okay. I recognize, Madam Minister, that there's a bit of a time crunch here, so what I'd prefer to do is just ask the questions that I have of you, and you're welcome to respond in writing and go from there. The first thing that I want to ask you about is in the budget itself. I notice that you have four employees in your ministry consuming approximately \$250,000. Am I correct in assuming, then, that the salaries in your ministry department average about \$60,000 apiece?

The next question that I have for you is that I notice that in the Alberta Science and Research Authority there are eight employees in that department, up from four in the previous year. It looks like their salaries average about \$100,000 apiece, and I'd like you to verify those numbers for me in writing. I'd like you to indicate

to me, if you don't mind, as well in writing, whether there's been any staff turnover and whether there have been any increased salaries paid to attract new staff and whether there have been any salary increments to any of those employees in either of those departments this year by way of bonus, gift, time off with pay, or any other cash incentive or inducement to encourage those employees to stay.

Now, I recognize that it's not quite a complete parallel, but putting together some of the information from your scientific activities budget found in your scientific and technology activities overview and putting together the budget of the Alberta Research Council, it looks like the Alberta Research Council spends about \$36 million and can account for about \$21 million of that in directly focused research. That would seem to be about a 33 and a third percent slippage or non research related expenditures. I don't know if your ministry has ever done an analysis of those, but I'd like to have your ministry, if you don't mind, do an analysis of the actual nonresearch component of the Alberta Research Council's \$36 million budget with a view to determining what the percentage is that goes into line research and what the percentage is that goes into running the office. Of course, if I divide the 330 jobs in that department over \$36 million, then we get an average salary which would be greater than even that of the minister of transportation. So of course that would be a fact that we'd want to uncover.

Madam Minister, I'm not going to make any comments about whether there should be one ministry of science or whether it should be amalgamated with another ministry. You may in fact have a reasonable case to make that quite the contrary, the minister of economic development should be phased out and all of his department put into science and technology. So I'm not going to ask for picking between two ministers, but I do want you to, if you can when you're responding, try and do an analysis as to what cost analysis you feel that the increase of expenditure in this department has been because of the creation of an independent science and technology ministry. Then when you get that benchmark, because in a mature way we acknowledge that there are extra costs in the creation of this ministry, I wonder if you could in writing make some economic case for why it is important that there be a ministry of science and technology. Some in the field would say that what has happened is that we have had a reversal in the size of government here in the last few years.

Now, I want to ask you, going on in not any specific order – I notice that your department is going to spend \$3 million in new capital investment this year, this in a department that has a total budget of something in the vicinity of less than \$50 million, I believe. That's a significant percentage of increase, and I wonder if you could give us some detail as to the breakdown of how that \$3 million in new capital expenditures occurred, whether those new capital expenditures occurred in some fashion through a bidding process, how long the planning went on before those capital expenditures were incurred, and how long, Madam Minister, it took to make the decision on each of the items making up the \$3 million decision.

You had mentioned to us earlier that one of the goals of this department, science and research, was to administer the social goals of the government. That was perhaps particularly inappropriate wording given a very emotional court case that has just been completed in the courts where sterilization occurred in the name and righteousness of science. So when someone mentions social goals in the same context as science, I'm always nervous about that. In relation to the \$3 million of capital expenditure, I'd like a detailed breakdown of that.

4:13

Now, the department overall looks like it's only spending \$253,000 in capital, and the reason of course is the artificial depreciation or the wearing out of the capital called amortization. I'd be grateful, Madam Minister, if you could tell me what percentage depreciation rate you use on the various categories of capital assets the department has and advise us as to those individual percentages and whether they track the depreciation percentages in the Income Tax Act of Canada.

I would also be interested in knowing, given the small amount of capital that's been expended over the years, why the depreciation is decreasing at a percentage greater than the asset acquisition. For example, it was \$3.9 million the year before, and it's now down to \$2.7 million of depreciation. That would lead me to believe, Madam Minister, that you have a way of tracking the total capital asset value of this department, because you have to have some raw numbers to depreciate. I would therefore like for you to produce for me in writing, if you don't mind, what your department assesses as the total capital asset value of this department so we can measure what the unclaimed cost is of expenditure to this department based on capital assets that of course are costing us opportunity costs by not being converted into revenue.

Moving along with some of the other issues, Madam Minister, if my shoddy bookkeeping has any merit, it looks like the Alberta Science and Research Authority simply pays \$19 million to the Alberta Research Council so that there's what an economist like Mike Percy might say is simply a wash between two government departments administered by the same minister. I'd be grateful if you could inquire of your accounting assistants within your department and advise us why you feel it's necessary for that economic wash to be presented in the way it is, unless one of the only reasons is to appear to minimize the cost of the Alberta Research Council by making it look like it's generating additional revenue from an outside source.

Now, Madam Minister, a couple of years ago there was some controversy in Alberta about whether the safety situation at the Research Council was all that it could be. At that time there was a certain amount of controversy as to whether some of the biological research going on at the Research Council was being preserved and kept safe from escape into the atmosphere. I wonder if in connection with your budget report you could advise us what steps in terms of economics have been taken to ensure that better containment procedures exist, if indeed there were any containment difficulties historically and what those containment procedures have cost the government and where that is found in your particular budget.

Now, Madam Minister, in addition to the comments found in the budget, you indicated you were going to be doing a certain amount of advertising and public relations. You described a proposed government expenditure of funds on science and technology in Alberta as part of the Alberta advantage. I wonder if you could advise us in the appropriate forum, by written report, how much is going to be spent to go on TV to tout the Alberta advantage by way of science and technology programs and advise me in that as well whether any minister or government official is going to be featured on TV in those particular programs and whether plots and subplots for those movies have been already drafted. What percentage of time is going to be devoted to what might be called public relations versus the percentage on each movie that would be considered to be actual science and technology driven movies? In that regard, Madam Minister, I'm wondering what effort the department has made to attract grants and donations from various commercial industries whose science's

subject matter will be focused on in those particular movies.

You had mentioned as well earlier, Madam Minister, that you have a board of management that has reviewed and provided budget scrutiny and the calculation of the costs in your department. I would be grateful if you would take under advisement releasing that budget scrutiny document complete with the working papers so that we'll be able to see the official, scientific analysis of the budget and measure it against the costs that you incur to the taxpayers.

Lastly, Madam Minister, I notice that you indicated in one of your publications that one of the projects being worked on by your research department is the hydraulic mining and ore transport, the so-called hydrotransport of the oil sands; that is, moving oil sands in a water slurry and by pipe. My understanding is that the industry takes the position that they have funded that program in its entirety, and your booklet suggests today to the contrary. So I would like you to advise me: who is the beneficiary of that hydraulic mining, and what is the cost to the government?

You also indicated you are pursuing the issue of steam recovery and the recovery process using horizontal wells. It had always been my understanding that the Department of Energy through AOSTRA had been funding that project. If you have today information to the contrary, I'd be grateful to receive that information.

The next issue I want to raise about some of your specific projects is that you indicated you are doing a comprehensive study to completely characterize the immediate short-term and long-term impact of biochemical oxygen demand, constituents from pulp mill effluence. I'm wondering if that is, in fact, another way of describing the northern river basins study. If not, I wonder if you're expending money on a concurrently running study that would be duplicating the work of the northern river basins study. I'm wondering, if it is the same study, whether you see that particular cost coming to an end.

Now, Madam Minister, I want to also talk about the Provincial Museum of Alberta hosting the Carnosaurs display. Sometime previously there was a controversial program in Alberta where provincial museum fees for entry were increasing. Is there within your budget any provision to provide free access to this particular display at least to individuals whom we consider disadvantaged? In the interests of your communication, have you made any allowance for a free entry for some people into that display, or is every Albertan who has paid for the project through their tax dollars going to be able to get in for free?

I also notice in your programs that you're doing a study on polymer and wood fibres to produce a pulp to be used for the production of high-strength paper. I wonder if you can tell me the cost of that particular study and what, if any, specific contribution you have received from that particular industry.

Now, Madam Minister, I've just touched the surface of my questions. I would be grateful if you could provide me with the description of those employers that you say have created the direct 700 jobs in this department. I would also like you to give me a further explanation of why public funding for research and development has dropped over \$1 million this year from last year. The reason given in the formal document says that the Research Council appears to be restricting itself and restructuring itself, but it seems to me that I have a hard time tying that to an industry drop in contribution. I'm wondering if you could provide me some additional analysis of that.

Now, Madam Minister, I would love to go on more, but there are about another eight or nine people who have questions and comments, so with your kind permission I'll conclude my

comments and questions at this time and ask – in the past you've always invited me to bring back any further questions that flow from your answers to my first set of questions. I hope that invitation will be extended again this year.

Thank you, Mr. Chairman.

Mr. Chairman, for the record, I also want to say that I feel it's important for the residents of Fort McMurray that I address the other committee that is going on concurrently. I would respectfully ask all members of this panel to not comment adversely on my leaving when the sole purpose of leaving is to attend another concurrent panel.

4:23

THE CHAIRMAN: It would be totally out of order, and we would never do that.

The hon. Member for Sherwood Park.

MR. COLLINGWOOD: Mr. Chairman, I'm sorry. I understood we were then going to alternate. You were going to have two and two and clear that up, and then with two and two you were going to alternate.

THE CHAIRMAN: Hon. member, as I said earlier, this is always the chair's decision. This is the way we've done it. I have absolutely no members, and nobody has raised their hand to speak from the government side.

MR. HLADY: I just wanted to speak to that, if you wanted me to, Mr. Chairman.

MR. COLLINGWOOD: Well, Mr. Chairman, I'll be recognized.

THE CHAIRMAN: The hon. Member for Sherwood Park.

MR. COLLINGWOOD: Thank you, Mr. Chairman. I thought that members on the government side would be interested in this budget. I'll continue on if there are no members on the government side interested in asking questions.

MR. HLADY: Actually, I would like to speak to that for a moment and let him go on with the questions. All we wanted to do, Mr. Chairman, was to allow the opposition to have as much time as possible, and that's the reason that none of the government members are speaking at this time. We wanted to allow the opposition members to have as much time as possible.

MR. COLLINGWOOD: Thank you, Mr. Chairman. That's entirely contrary to the ruling you just made a short time ago. We're not in designated subcommittee.

THE CHAIRMAN: Hon. Member for Sherwood Park, let's get on with the estimates.

MR. COLLINGWOOD: Thank you, Mr. Chairman.

THE CHAIRMAN: A point of order, Government House Leader.

MR. DAY: Under 23(i). The suggestion's been made, the insinuation about our members and their wanting to be involved. This is also further to a concern that was publicly released by the Member for Calgary-Buffalo in a letter just recently where he said: our members can just write in their questions, and they don't have to speak at all during estimates. That's coming from the Liberal opposition. So we're trying to be as sensitive as we can,

though it does push our patience somewhat for a member to release a letter to the public and say that our members can just go ahead and write letters in as if we have no constituents. However, in spite of that slap in the face and insult to our own constituents, we are still willing to allow the Liberal members to take all the time they need.

MR. COLLINGWOOD: Mr. Chairman, I was following your ruling.

THE CHAIRMAN: Hon. members, we don't need any more points of order. I'm sure, hon. Government House Leader, that there have been remarks that the government didn't like, and I'm sure there have been remarks that the Official Opposition didn't like. We're not here to discuss that. To be honest, I'm trying to get as many questions in because that is the key to these estimates.

The hon. Member for Sherwood Park.

MR. COLLINGWOOD: Thank you, Mr. Chairman. My first question to the minister. In reviewing the Agenda '96 document and the business plan, I was noting that with respect to performance measures, performance measures are set out and indicated for the Alberta Research Council specifically. What I have not been able to locate, Madam Minister – and you can help me with this – are the specific performance measures of the Alberta Science and Research Authority.

Now, at the top of your Agenda '96 document at page 294 under science and research you identify key performance measures, but you don't indicate what those are. There are on the page across, 295, what you've identified as corporate business goals and targets. They are somewhat similar. What I'm asking, Madam Minister: what are the specific performance measures in your department other than the Alberta Research Council?

With respect to the Alberta Research Council performance measures that are stated, I noted that in item 1 there is a strategy entitled "market focus in key sectors," and the measurement to be used for the Research Council is the "client increase in gross sales" in millions of dollars. Now, throughout the ARC targets in '95-96 through to '98-99, that increase is 70, 80, 90, 100. The appearance is that the anticipated increase through the ARC is linear, where it increases by \$10 million each year, if I'm reading this correctly. But I was struck with the comment by the hon. Member for Cypress-Medicine Hat, who's the chair of the Alberta Research Council, that he is anticipating that with the work that is being done in 21 countries around the world, we should expect an exponential growth in the amount of involvement at the Alberta Research Council. So my question to the minister is: through what process did the ARC targets arise, and why isn't it exponential, as suggested by the Member for Cypress-Medicine Hat, because of the work that has been going on at this point in time?

The performance measures also speak to the issue of spin-off companies and an anticipation that spin-off companies will be a direct result of the work being done at the Alberta Research Council. The chairman of the Research Council, the Member for Cypress-Medicine Hat, spoke about the issue of the spin-off companies, or the spin-out companies. Mr. Chairman, I have had some difficulty understanding the whole process of spinning out companies from the Alberta Research Council. It is my understanding that the Alberta Research Council acts as a service to the industry, and through the efforts of industry and the private sector working in partnership, the commercial application of new research ideas comes to pass and then can move into the private sector. What I'm looking for from the minister or the chairman of the Research Council is the benefit that comes to the people of

Alberta in having members of the Alberta Research Council work directly on research initiatives and then ultimately create private companies, which go into the private sector, that benefit significantly from the work that has been done within the Alberta Research Council.

The concern I have also is that the Alberta Research Council as a service to industry in joint venture partnering is doing work for companies that already exist. They come to the Research Council; they ask for assistance in developing applied technology for the research that they have. How is it that we can have members of the Alberta Research Council engage in research, find themselves owning a company, exploiting it to their advantage, and potentially going public to raise more funds? What benefit do the people of Alberta get out of that? In that public dollars have been used to develop that proprietary information, is there a process whereby the individual who has worked on that research purchases the proprietary information from the Alberta Research Council?

I'm asking my questions fairly generally, but I would like to hear from the minister or from the chairman of the Research Council just exactly how it is the process works to create the spin-off companies, how in fact the process will work throughout performance measure 4 in the number of spin-off companies. How do you assess how many spin-off companies you're going to have at this point in time? What plans are already in place to meet those target measures in the years '96-97, '97-98, since you have already anticipated that you know the number of spin-off companies or expect the number of spin-off companies to arise? So what I'm looking for in the answer, Madam Minister, is some fairly specific detail on how that, quote, process is going to work.

There was some discussion about the work that is going on with our new development of Alberta's oil sands, a tremendous amount of work going on. I'd like some more detail on that. My question simply arises from the introduction by the Member for Cypress-Medicine Hat about the work that's going on in oil sands research. Who exactly is involved? Who are the joint venture partners in the oil sands development? What component of that is private sector? Is it, in fact, a joint venture arrangement? Is it being initiated by the Alberta Research Council independently of joint venture partners? Who are the joint venture partners? What are the specifics of the research projects that are being conducted at this point in time? Some of that, Mr. Chairman, may have come out in the opening remarks from the chairman. I was attempting to listen to his comments about that, but I'll leave those questions with him to answer specifically.

Mr. Chairman, I will leave my comments at that, with those questions. I look forward to responses, and I'll allow the floor to be turned over.

4:33

THE CHAIRMAN: The hon. Member for Calgary-West.

MR. DALLA-LONGA: Thank you, Mr. Chairman. I have a few questions that are dealing with the Alberta Research Council. The hon. Member for Cypress-Medicine Hat talked about the very company I have some interest in, which was that hamburger disease company, and I believe it was spun into a company called Synsoorb. Synsoorb's done very well on the Stock Exchange. What did the Alberta Research Council and the people of Alberta get for transferring that technology into Synsoorb? I believe some of the people at ARC went with that company. I may be mistaken on that point; I can't remember. In that regard, what are the criteria? It would seem to me that if we have an organization such as the ARC having some of its members go out into industry

at some point when a product is commercialized, we've got a bit of an internal conflict. I don't have a problem per se with that process, but do we have, say, a carried interest of some sort or a percentage of profits or a percentage of gross revenues? What do we get back?

I would disagree somewhat with the critic from Edmonton-Manning, who says we should be looking at just cost recovery. I don't think we should look at just the cost recovery, because that could get difficult (a) to determine what cost is, and (b) there are going to be clearly some instances where we're not going to have cost recovery. What we should have is a generic set of guidelines. My question, just to make it clear, in addition to the ones that I've asked, is: what are, if any, the criteria for people going commercial with their ventures once they've been in ARC, and what are the financial criteria that we set out?

Some time ago I recall that we had problems encountered where staff researchers were also in the business of utilizing the research, and there were some background noises happening there. Have these problems been clarified? What was done to clarify that?

A word keeps coming up, and it's scary to me. It shows up in the business plan, and it shows up in this one document that was handed out: "leveraging of industry funding." What does that mean, "leveraging of industry funding"? I know what "leveraging" means in other terms. Really there's no description or definition that I can find as to what leveraging industry funding means, and I would like to be clear as to what that means. Does it mean that we lend these folks money? Does it mean that we find money for them? If we could just be a little clearer on that, I'd appreciate it.

On page 363 the claim is made under the business plan summary - it's about the fourth bullet under ARC - of the "contribution of \$120 million to Alberta through the successful commercial exploitation of technology by customers and partners." That's a pretty impressive claim, and I just wonder if the Member for Cypress-Medicine Hat would have any sort of evidence substantiating that or sort of a detailed list of where we got that number from.

Now, on page 365 a number of spin-off companies. We've got four in 1994-95, and then the target is to have three and four thereafter. How does this compare back to the \$120 million, and could we have the names of those spin-off companies? I imagine Synsoorb must be one of them, so there are three more to go.

While we're in that area, on page 364, just an observation under Alberta Research Council key performance measures - this is just sort of a comment - we talk about the performance measures, wealth creation being the first one, then sales stimulation, job creation, and research and development funding by the private sector. Well, wealth creation seems to cover everything else. I mean, it seems to be like everything's overlapping in there. If this is the way you're measuring performance, it's kind of fuzzy because your performance criteria aren't really separate and distinct. My point is that they kind of overlap one another, particularly the first one, which I've never really seen, not even in commercial companies, as a performance measure or at least described that way: wealth creation.

Mr. Chairman, there are certainly a lot of questions that could be asked, but I think those are all that I'd like to ask for this point in time.

THE CHAIRMAN: The hon. Member for Calgary-North West.

MR. BRUSEKER: Thank you, Mr. Chairman. I've been looking forward to the opportunity to enter and do some comments on

this. I think back to the 1993 election, when we had the pronouncement of government downsizing and we amalgamated the three departments of economic development and trade; technology, research, and telecommunications; and also another, the department of tourism, into one department then called Economic Development and Tourism. We still have that same department, and we have the hon. minister here today. We've also now got a department of science and research, and we've got a privatized government department called the Alberta Tourism Partnership. So we've gone from three to three and made virtually no headway except that we've gotten rid of, I suppose, one cabinet minister and have a head of the ATP instead.

Having said that, I want to ask a few questions about this particular department. I guess I wanted to start with a comment that I noted the Member for Cypress-Medicine Hat made about OSB creating all these new jobs. Well, the way I see it, all that OSB does is take plywood off and put OSB on, and the net creation of jobs would be nil. It's just a change of one product for another. So when I look at OSB versus plywood, I don't know that in the cost of a house it's going to make a significant difference that's going to spur anybody on to . . .

DR. L. TAYLOR: It does actually, Frank. If you were in the building industry, you'd know that.

MR. BRUSEKER: Well, having built a house and looked at the price difference, the difference is insignificant on the total price of the house.

MR. N. TAYLOR: He builds corrals. He doesn't know the difference there.

MR. BRUSEKER: Well, I suppose that's true.

With respect to the Alberta Research Council . . . [interjections]

THE CHAIRMAN: Order. [interjections] Order. [interjections] Order. If you want to discuss . . .

MR. N. TAYLOR: Sorry, Mr. Chairman. I thought he was asleep over in Cypress.

THE CHAIRMAN: Cypress-Medicine Hat. I know he's trying to answer the question, but it's not really . . .

DR. L. TAYLOR: Point of order.

THE CHAIRMAN: Oh. On a point of order.

DR. L. TAYLOR: The member suggests that I'm asleep, and I can assure you I wasn't. It's bad enough I have to listen to them, but to look at them too is too much.

THE CHAIRMAN: The hon. Member for Calgary-North West. There's no point of order.

MR. BRUSEKER: Thank you, Mr. Chairman. Page 370 shows that the total expense of the Alberta Research Council will be \$36,211,000, which is a significant amount of money. Yet when I look at the science and research key performance measures on page 364 of the budget and I look at wealth creation, it looks like for the expenditure of \$36 million from the Alberta Research Council we will see a growth of some \$15 million. In other words, we're going to spend about \$2.30 to create a dollar's

worth of wealth. Now, that must be some kind of new economics, but it seems to me that if that's the real target, then we're not getting value for the money out of what it is we put into the Alberta Research Council over this year. I guess I would have to say that if the wealth creation figures were cumulative, it might be much more impressive, but unfortunately they're not, as indicated by the other figures that are shown there. So I guess one has to wonder then: if we're spending \$2.30 to create a buck, what's the point of it?

Having said that, I do acknowledge that the Alberta Research Council has done some good work, but the issue about creative, "innovative financing," as mentioned on page 362, does create some concern for me. I recall some of the innovative financing that was done by NovAtel in the past, and I'm wondering if we are looking at some of the same kind of innovative financing that is going to lead to some difficulty down the road.

In particular – and I notice that it's not included in this particular budget anymore even though it used to be once upon a time – our good old friend Chembiomed appears in the Department of Economic Development and Tourism and shows that we've lost \$60 million in that creative, innovative financing project. I guess the question I would have to put, then, to the minister and to the member in charge of the Alberta Research Council is: what have we learned from Chembiomed to prevent similar events from occurring?

4:43

When I look at the Alberta Research Council's goals, as listed on page 362, I guess I would have to ask: what are the strategies to achieve those goals? There are goals to "leverage government investment," to "attract out-of-province technology," and to "effectively collaborate to transfer academic research." Well, those are noble goals. How are they going to do it? I think if we can't operationalize those goals, then we can put warm, fuzzy statements down in black and white, but they don't mean a blessed thing.

The minister in her opening comments made some reference to the Alberta Heritage Foundation for Medical Research and that there was a \$350 million endowment fund created for that particular organization, yet it's not listed here at all. It is an endowment fund. In the move away from the whole net budgeting concept, I'm wondering if it shouldn't be somehow listed in here in black and white on this set of pages dealing with the department of science and research. It is a significant commitment by the provincial government – \$350 million – the interest on that. It's not mentioned anywhere particularly on these pages.

MRS. MIROSH: The heritage trust fund.

MR. BRUSEKER: I know it's from the heritage savings trust fund. The reason I'm raising it here is because I understand it falls under the minister's mandate to look after what's happening in that department. It seems to me that it's something that should be mentioned under this department if indeed it's part of the mandate. So I have to wonder why that's not in here.

Mr. Chairman, with respect to the Alberta Science and Research Authority there's one model in particular in Calgary that I have had some exposure to and that I'm sure the minister has as well. Discovery Place 100, headed up by Bill Craft of the Calgary Research and Development Authority, has been fairly successful in what it has done. The reason they've been successful is because they have developed an incubator process that keeps costs down and allows things to happen on a relatively low-cost basis for those small one- and two- and three-person start-up

corporations. In the highlights for strategies under the Alberta Science and Research Authority, I don't see any mention with respect to incubators or the Discovery Place 100 concept or anything like that. I'm wondering if the minister could address that, because it seems to me that that in particular has been one idea that has come forward, that has worked and has been fairly effective. Companies have started off there, and then they've moved on once they've grown their sea legs, as it were, to be able to stand on their own. So I would have to question a little bit why that's not in there and whether that is being given consideration.

Again, the goals that are listed for the Alberta Science and Research Authority certainly talk about concepts that one could not argue with: stimulate research, develop a policy, conduct a review, et cetera, et cetera. I'm wondering if we could get a little more detail with respect to the operationalizing of those goals into actual achievements that are measurable.

One of the questions I want to put to the minister – and I've heard this concept floating around in the past. We have the Alberta Heritage Foundation for Medical Research. One of the concepts that I've heard is that the province should consider the creation of a similar endowment fund for research other than medical research. Is that possibility being given consideration? In fact, I've even heard a figure of \$200 million being suggested as a possible start-up figure for a similar kind of endowment fund, meaning of course that the interest money comes out, not the principal amount. Is that being given consideration by the Alberta Science and Research Authority? If so, then how would that be developed?

One of the questions that I have to put, too, is with respect to the Alberta Science and Research Authority. Although it doesn't say it directly, as I read through the business plan summary listed on pages 362 and 363 of the budget book, I only found the word "university" mentioned once, and that was under the Alberta Research Council. I would like to hear the minister's comments in terms of better use of or liaison with the research staff both in terms of the research staff we have and of course the research investment we have in our universities across the province of Alberta, particularly the University of Alberta, the University of Calgary, and the University of Lethbridge, where we have significant research occurring in a variety of faculties. I think that there is a considerable amount of expertise that can come out of those departments – departments at the university, I'm referring to – that could lead to some of these spin-off companies that the minister has targeted in her key performance measures as being a goal.

Now, with respect to spin-off companies I think certainly that is a noble goal of the department. I'm a little concerned that sometimes, as in the case with Chembiomed, for example, a company has spun off before it is ready to be spun off, and the provincial government finds itself losing considerable amounts of money. Chembiomed was a \$60 million lesson. How do we evaluate those spin-off companies so that we know – I guess we'll never know for sure a hundred percent. How can we increase the likelihood of success of those spin-off corporations? Without that likelihood of success we won't in the long run increase our diversification across the sector we're looking at.

Finally, Madam Minister, I think there was just one other question I had. With respect to the ministry manpower authorization on page 372, eight persons are allocated to the Alberta Science and Research Authority – I think the Member for Edmonton-Manning made some comment about this – but we have 85 members on an economic development authority in the Department of Economic Development and Tourism spending

\$300,000. Here it looks like there are eight people going to spend \$1.48 million. Loath though I am to give praise to the minister of economic development, it seems he's giving the bigger bang for the buck with 85 people only spending \$300,000.

DR. L. TAYLOR: That's his reputation.

MR. BRUSEKER: That's his reputation? Well, that could well be the case.

I guess the question has to be: why are these eight people spending that kind of money: \$1.48 million? How will we effectively evaluate the worth of that expenditure of \$1.48 million that these eight people are going to be spending?

With those comments, Mr. Chairman, I'll stop and let someone else have the opportunity to raise a few questions.

THE CHAIRMAN: The hon. Member for Edmonton-Meadowlark.

4:53

MS LEIBOVICI: Thank you, Mr. Chairman. The minister at the outset of her comments indicated that she wanted input and was very open to having members of the opposition provide valuable advice and recommendations. If I might make the suggestion to the minister that if she was really serious with that particular invitation, then she would also invite us to sit on the standing policy committee that looks at setting the policy and directions for this particular department. In fact, if other ministers around the table were equally interested in having our input, then that input would be probably as valuable if not more valuable at the front end of a process as opposed to at the back end of a process.

With regards to the science and research budgets in particular, there are a number of points that I would like to make. The first, I guess, is questioning why we have a science and research department at all. When we look at pages 292, 293, 294, and so on, we see that there's a diversity within the department that's hard to explain. We see that there are only two agencies: the Alberta Science and Research Authority, ASRA, and ARC, the Alberta Research Council. But somehow the minister can't get the department's act together so that when you look at mandate, strategies, key performance measures, and objectives, they are the same headings at least within the two different agencies. One would think that when one looks at ASRA, we should be able to quite easily see what the mission and vision is. It's not there. We should be able to see what the core businesses are, as they are in ARC. It's not there. We should be able to see what the corporate business goals and targets are. They're not there.

Given that the government's intention is to form a task force on technology under economic development – it's my understanding that that's to occur – one would also question why the science and technology department couldn't be subsumed within that particular department. In fact, when one looks at what the goals and objectives are, when one looks at the key performance measures, they seem to all have to do with areas of economic development and in fact should most rightly stay under the department or be subsumed under the department of economic development.

It begs the question, then, of what the role of the minister is and whether in fact there is a role for the minister and whether or not this department is a sham department to provide a ministerial position as well as a position for a member of the government, a backbencher, to have dollars as a chair of a particular council. If I were a taxpayer, I'd be interested in knowing . . . [interjection] I am a taxpayer and therefore can rightly speak, thank you very much. What brings this even more to the taxpayers' attention is

that the minister's office as a percentage of total budget is 1.2 percent. The office of the minister of research and science is 1.2 percent of the total budget.

Now, if we were to look at agriculture, which is an area, I'm sure, that a lot of the Conservative members are interested in, the minister's budget in agriculture is .1 percent. That's a significant difference, I would beg to put forward. Advanced education, if these figures are correct – and I'm sure that if they're not, the minister will be the first to let me know – is .02 percent. The minister's budget in advanced education as a percentage of the total budget is .02 percent. Community Development is .14 percent. I'm sure if we went through the other ministries – these were just ad hoc figures – we will find that the minister of science and research is costing as a percentage of total budget a whole lot of dollars.

Then it begs the other question. Because this government is very, very concerned about whether or not there are any cost benefits, I would like to know what the cost benefits of this particular department are to the taxpayer. If in essence I were to believe what we are being told, that this department is providing all these wonderful opportunities, then I would like to submit that within no time at all this department should be totally self-financing. In other departments we are seeing the introduction of user fees. This particular department, where there are all kinds of wonderful research with advanced technologies that are being put forward and spin-off companies as a result of the investment of the taxpayers' dollars, should not only be self-financing but should also be bringing forward a profit to the taxpayer. I would like to see in the next budget or in the minister's reply an indication as to at what point in time the department of science and research will be a self-financing department that will in fact be bringing a profit back to the taxpayers as opposed to a drain on the taxpayers' dollars.

We go to the area of how in fact the objectives of science and research are being measured. My hon. members have in fact talked to some of those points. When we look at page 294 of Agenda '96, we notice some objectives have been put forward in science and ASRA and that these objectives are objectives that are, again, going to do wonderful things. Now, given what I've indicated with regards to the department becoming self-financing, it indicates in the objectives that ASRA will “improve the cost effectiveness and productivity of the science and research infrastructure in Alberta.” I'd like to know how they plan to do that, I'd like to know what the extra dollar cost is going to be to do that, and I'd like to know what the dollar return to the taxpayer is going to be on having done that.

There's also going to be an improvement in the “management and commercialization of technology and intellectual property developed with public sector funds.” Well, it begs the question: why do we need to improve it? Is it that bad that it needs to be improved? If it is that bad, I'd like to know what is making it that bad. If it is fine the way it is, why do we need to improve it? And I would like to know, again: what is our percentage return on any technology or intellectual property that has been developed with public-sector funds? What is the return to the taxpayer?

We're going to be implementing a

communications initiative designed to:

- (a) increase recognition of Alberta in the global community . . .
- [and]
- (b) improve level of support.

Again, I'd like to see a cost-benefit analysis of how many dollars come in as a result of that communications initiative. I would also like to know if there are any trips for the minister or for the chair of the Research Council that will be involved with that

communications initiative to promote the so-called Alberta advantage.

MR. COLLINGWOOD: Or at least who's buying dinner.

MS LEIBOVICI: Or at least who's buying dinner, as the hon. Member for Sherwood Park has indicated, and who we're inviting to dinner as well.

When we look at ARC and some of the objectives of ARC . . .

MRS. MIROSH: We don't call it “arc.”

MS LEIBOVICI: Well, you may not call it ARC, but that's what it spells, if anyone were to look at how it's spelled. With regards to ARC some of the objectives I see here are objectives that I wonder why the universities and hospitals sector are not involved in, why in fact as a government we need to be engaging in these activities other than for perhaps the sole reason that we're not funding the universities and hospitals sectors adequately so that they can provide the research that the Alberta Research Council is providing.

To skip a little bit as sort of an aside, if this government indeed plays research and science as a priority, the question then becomes: why is advanced education being cut to the extreme that it is so that we can't produce the researchers and scientists that are required in order to do the research that this particular department says is required? You can't have one without the other unless you're planning to import all our researchers and scientists. I would like to think that we would be able to have some home-grown Alberta researchers and scientists at this point in time and in the future. The effects of the cuts to advanced education and education will not be seen today, will not be seen tomorrow, but will be seen within the next 10 years.

Page 364, which looks at the key performance measures. The member to my left indicated that was a good page. Some of the other members who have spoken ahead of me indicated there are indeed problems with this page, that the details on this page look fine, but in reality can the Alberta Research Council in fact claim credit for some of these criteria? Can the Research Council say that job creation as a result of its activities was X number of jobs?

5:03

DR. L. TAYLOR: Yes.

MS LEIBOVICI: If they can – and the Member for Cypress-Medicine Hat has indicated that they can – then I'd like to see where those jobs are created. I'd like to see what kinds of jobs they are, I'd like to see what the salaries of those jobs are, and I would like to see what industries those are in. The same then – if I take that same principle that, yes, you can account for these numbers – in terms of sales stimulation, wealth creation, research and development funding by private sector, contract employees, number of spin-off companies, joint research venture agreements. I would like for the minister to come back with the details on those, the exact details, not some vague wording that says there are X number of companies that this has happened with. I'd like to see the exact details, because if the minister cannot provide it, then the figures for 1995-96 are targets and nothing more than targets; they are not fact, but they are fiction.

DR. L. TAYLOR: It's just the truth here, Karen.

MS LEIBOVICI: I am not saying whether it is the truth or not, hon. Member for Cypress-Medicine Hat. All I'm saying is that

it would be appropriate to have that information here in front of us, and if it's not here in front of us, then the minister can provide it prior to our second look at the budget which will occur sometime next week I believe.

There is another point I'd like to make because I found an interesting footnote. It's on page 295 and maybe elsewhere. It indicated that "there are estimated to be two indirect jobs created for every one direct job created." I found that to be an interesting figure because when the loyal opposition indicated that for every job layoff within this province there was going to be a direct loss to the economy as a result of those layoffs, we were pooh-poohed. We were told, "Oh, no, that's not correct." Yet here I have the exact same situation, but it's okay for it to be in here. So if, in fact, this is the estimation, I would like to have the reference from which this estimate has come.

With those comments – and again, we will know within the next week or so whether or not this information is forthcoming in order for the debate to be useful when we bring this back into the general committee – I would like to submit that the information from the minister and from the chair is required in order to make that debate useful, so that, as the minister had indicated at the front end of her discussion that she would like to have our input and that we would be able to engage in some useful conversation, that information will be presented to us within a week's time.

Thank you very much.

THE CHAIRMAN: The hon. Member for Lac La Biche-St. Paul.

MR. LANGEVIN: Thank you, Mr. Chairman. First of all, I would like to commend you, Madam Minister, on how you're handling the department of science and research and also the hon. Member for Cypress-Medicine Hat for his added statements at the opening.

I have a couple of concerns or questions that I'd like to express. I'm just wondering, Madam Minister, why the increase this year to that department from \$334,000 to \$1.481 million? Could the minister explain to this committee the reason for the increase? That's about a three-fold, four-fold increase. Also what process is in place for ASRA to review the research budget of other ministers? Because I am sure that there is some cross reference between your department and other departments like in oil and gas

when we do research for the oil sands and several departments where you might have a crossover between different ministers that are employing the research and development that are put forward.

This is the extent of my questions today, and I would like to move at this time, Mr. Chairman, that the subcommittee rise and report the progress to date.

THE CHAIRMAN: We've got a motion on the floor that the hon. Member for Lac la Biche-St. Paul has moved that the subcommittee rise and report. All in favour of that motion, please say aye.

SOME HON. MEMBERS: Aye.

THE CHAIRMAN: Opposed, if any.

SOME HON. MEMBERS: No.

THE CHAIRMAN: Carried.

MR. DAY: Recorded vote.

THE CHAIRMAN: Recorded vote. Raise your hands if you're in favour that we rise and report.

[For the motion: Ms Calahasen, Mr. Coutts, Mr. Day, Mr. Friedel, Mr. Hlady, Mr. Langevin, Mr. Lund, Mrs. Mirosh, Mr. Smith, Dr. L. Taylor]

[Against the motion: Mr. Bruseker, Mr. Collingwood, Ms Leibovici, Mr. Sekulic, Mr. N. Taylor]

AN HON. MEMBER: How is this vote being recorded, Mr. Chairman?

THE CHAIRMAN: It'll be in *Hansard*.

Okay. The vote's been recorded. Thank you for your time, and we'll see you back in the House in five minutes.

[The committee adjourned at 5:10 p.m.]