[Chairman: Mr. Oldring]

[10:02 a.m.]

MR. CHAIRMAN: Good morning, ladies and gentlemen. We'll call the meeting to order. Before I introduce our guests this morning, I want to just cover a couple of housekeeping matters. As you know, the earlier meeting with the Treasurer had to be canceled, and I wish to advise the members that it was at the request of Mr. McEachern, due to the untimely death of his father. The Chair initiated his own prerogative on this one and felt that it was appropriate to postpone the Treasurer's meeting at that time. I will be rescheduling the Treasurer as soon as it's possible, but I haven't been able to confirm a date at this point.

I hope that you've all now received notice that the Minister of Recreation and Parks has been rescheduled from November 19 to January 11. On the 11th, I would advise everyone to note that it will be at 1:30 p.m., beginning in room 312, next door here, to facilitate a slide presentation.

The other thing that I would like to bring to the members' attention is the tentative tour on November 17 of the Syncrude plant; we weren't able to arrange that. A number of the senior people at Syncrude had previous commitments that day. So rather than go and miss that opportunity, we felt it would be better to reschedule to a later date. Hopefully at the early part of next year we'll be able to make those arrangements.

Mr. Gogo.

MR. GOGO: Just on your housekeeping comments, you mentioned the untimely death. I just wonder what the definition is of "timely death."

MR. CHAIRMAN: Well, if the funeral could have been Friday instead of Thursday, Mr. Gogo.

MR. GOGO: Obviously the government didn't organize that.

MR. HERON: On that point, Mr. Chairman, I wonder if, as chairman, you could take the unanimous expression of sympathy to Mr. McEachern from this committee. If you could, please.

MR. CHAIRMAN: Thank you, Mr. Heron. I'll be sure to do that. Good.

Well, with us this morning we have the Hon. Les Young, Minister of Technology, Research and Telecommunications, and joining Mr. Young is a member of this committee, wearing his other hat this morning, Mr. Fred Bradley, the chairman of the Alberta Research Council. Gentlemen, we're extremely pleased to have you with us this morning. I draw to the members' attention that we're dealing with items on page 11 in your trust fund report, the universal rural private telephone line service, and page 15, the microchip design and fabrication facilities and the Electronics Test Centre.

It's customary, Mr. Minister, to extend an opportunity for you to open with some brief comments, and we would also extend that opportunity to Mr. Bradley. Then we'll turn it over to questions from the members. So on that note, Mr. Minister, we'll turn the floor over to you.

MR. YOUNG: Standing or sitting?

MR. CHAIRMAN: Sitting is just fine, Mr. Minister.

MR. YOUNG: Thanks. Well, Mr. Chairman and members of

the committee, perhaps just a very few comments. I scanned Hansard of last year for this committee and realized that if I made long opening comments this morning, I'd be making the same comments to some degree as made last year. I'm not sure that will be as helpful for the committee's time as otherwise. So let me, with respect to the individual or the universal rural private telephone line service, as it is headed in your heritage savings book here, just indicate that on a forward basis -- and maybe your deliberations are more in terms of what happened in the year of the expenditure as reported here. In that year there was a considerable amount of progress made in plowing of lines; that is, the portion of the loop between the exchange and the rural subscriber. As you know, the hearings before the Public Utilities Board were not completed until this summer, and for that reason the program could not go forward in the final sense. Suffice it to say that the plowing has continued this year for that portion of the work that needs to be done between the exchange and the subscriber loop.

As I'd earlier reported to the Legislature, I believe about \$90 million and some worth of switches have been ordered by the Alberta Government Telephones to replace switches in exchanges that must be replaced before individual service can go forward. So we're proceeding now on the basis of engineering. And that's something I'd like to make clear: the priorities or the sequencing of individual service depends upon engineering criteria to the greatest degree. There must be adequate capacity in the switching in each exchange, and that in some instances requires either bringing in more of the current kind of switch or waiting until we can bring in digital switches. Those switches have been ordered, and that is one technical bottleneck in the system. The next one is, of course, the loop between the subscriber and the telephone exchange.

The program started in September. However, I should advise you that in terms of conversion, a major initiative will be under way in the next two weeks. The literature has been completed which will be going to exchanges, and I think we will be looking in the order of 50 exchanges within the next six weeks which will be receiving notification of conversion. That indicates the kind of rush that's coming down the pipeline in terms of the activity on conversion.

I'm going to leave the Electronics Test Centre to my colleague Fred Bradley, who is chairman of the Alberta Research Council, because the Electronics Test Centre, as we discussed last year, is in fact managed or operated by the Alberta Research Council, with its own board but operating under the aegis of the Research Council.

I'll make a few comments on the Microelectronic Centre. In terms of the expenditure -- again, I have to look forward; I'm sure you are interested to know where it's at now. It has the capacity to fabricate chips and is doing so based on a 5-inch diameter. It is generating some revenue but is certainly not on a break-even basis and may in fact be some time getting there, if it ever does. What we have had happen as a result of the expenditure shown in your estimates book is in Calgary a centre for the design of integrated circuits -- and that's a well-developed centre with a good capacity -- and in Edmonton a manufacturing opportunity or a manufacturing plant.

Mr. Chairman, I don't know whether the Microelectronic Centre was one of those you were contemplating for a possible visit or whether any members of the committee have ever been there to see it, but it's a very special environment; the air has to be kept free of any dust in the very pure sense. The centre is now doing work besides for some Alberta firms and for the university, but it has also done some work for Lockheed and several California companies, and that's desirable in the sense that it's serving as a magnet for technology transfer. Not only does it provide a service there for which it gets paid, but it also provides a service to Albertans because they then become involved in the technology that's available in California or whatever other centres.

I am pleased with the progress, although we are examining the balance of resources and the utilization of resources in the centre. Looking forward, my concern is that it should be supportive of our Alberta firms. It may be that requiring it to support small firms and be a missionary, if you will, in utilization isn't necessarily consistent with making a profit or even breaking even. That's a judgment we're going to have to make in the very near future.

MR. CHAIRMAN: Thank you, Mr. Minister.

MR. BRADLEY: Mr. Chairman, I'm very pleased to be here this morning to report to the committee on the activities of the Electronics Test Centre just to refresh the committee's memory in terms of what the Electronics Test Centre is.

The capital for the Electronics Test Centre came from the Heritage Savings Trust Fund, and it provides a unique test facility for firms in Alberta and western Canada to test almost any conceivable electronic device. One of the very impressive pieces of equipment we have there is a terminal attachment facility, which is one of three in the world, which basically means anything that would connect to a telephone line piece of equipment that had to be tested in terms of being certified to go on the market can be tested at this facility. That's a very unique piece of equipment and is receiving a lot of interest from any company that has either a computer terminal or telephone answering device or any sort of device you would attach to a telephone.

The concept was to provide this sort of unique test facility for electronics here in Alberta so that Alberta firms could get their equipment tested and certified so it could get out into the marketplace, to provide advice to these companies if they had any technical glitch. The test centre can also provide that sort of advice to a company to get its products certified.

To date, the test centre has been involved in some 492 projects from some 307 companies. Sixty-four percent of that has been from Alberta-based firms, so it's been very active here in the province. They've had some 309 projects they've been working on from some 175 Alberta companies, and I could give you a breakdown on what sort of activity they've been doing from firms outside the province. Therr have been some 83 projects from 55 British Columbia firms, 29 projects from some 16 Saskatchewan firms, eight projects from six Manitoba firms. There have been 45 projects from some 39 companies from the rest of Canada and 18 projects from 16 firms outside of Canada. So that sort of gives an overview in terms of the activity of the test centre. They've been working on plans to continue to utilize the test centre, making sure that Alberta firms are aware of its existence in working with Alberta firms and also marketing the services outside the province.

MR. YOUNG: Perhaps, if I might just add another comment before questions, Mr. Chairman. I'm proud to advise the committee today that a number of these pieces of infrastructure the Electronics Test Centre, the Microelectronic Centre, the Alberta Laser Institute, and the Alberta Telecommunications Research Centre -- have formed themselves into an electronics network so that they co-ordinate their activities and try to develop synergism. It was through their initiative and support that we were able to provide, and we held, what is called a Premier's forum on the electronics industry in Kananaskis in October, and were able to have approximately 20 CEOs or very close to CEOs from companies off the *Fortune 500* list who were able to join with Alberta companies in Kananaskis. We were examining what had been accomplished and where the future is in the electronics industry and particularly what applications and directions might best be taken for Alberta.

The forum was a very good one and was very helpful to us in that sense, but it had another very important function and that was that it made those companies who came aware of what's already happening in Alberta. It made links between our Alberta companies -- we had about 50 of them present -- with the international companies so that we could get some crossfertilization and some market potential from that. I think it was a very useful forum because it did involve the Electronics Test Centre, which is one of the ones before you today, and the Microelectronic Centre. I want to advise the committee of what I think was a very great success and a very good promotion for Alberta.

MR. CHAIRMAN: Good. Thank you. No further comments? Then the chair would recognize the Member for Calgary-Buffalo, followed by the Member for Athabasca-Lac La Biche.

MR. CHUMIR: Thank you, Mr. Chairman. I'd like to welcome Mr. Young and Mr. Bradley to our hearings once again. They're both looking well. I'm particularly delighted to see Mr. Bradley with fur still on his face -- very encouraging.

MR. CHUMIR: I would just like to make an observation if I could, and that is something that disturbed me last year. I commented and would like to comment again with respect to what I consider to be very poor information provided to the committee in preparation for these meetings. There are only three programs involved here, and it seems to me it would be very simple to prepare a relatively up-to-date report with respect to what is going on in these programs, particularly with respect to some of the financial information, costing, number of projects, and so on. As it is, all we have are three very brief paragraphs in the annual report, which are a year out of date. As I noted last year, I'm finding more and more that the way in which these committees and indeed the Legislature are administered requires MLAs to play the role of bloodhounds and sleuths rather than policymakers, which is what we were elected for. So I would hope to stimulate some better information in reasonable time in advance so that we could digest it and have the basic factual information there so we could craft sensible policy questions based on that, rather than having to seek out the raw material here during valuable collective committee time.

I'd like to . . .

MR. CHAIRMAN: In response to that, Mr. Chumir, it was too bad that you weren't able to join us on either of the tours we've had at the Research Council. They've been very, very informative, very helpful, and we received a lot of good information at the time. But certainly all of that information is available upon request and really doesn't take an awful lot of effort to ascertain it. MR. CHUMIR: Well, it would seem to me that it wouldn't take a heck of a lot of effort just to prepare a little package for members. It seems to me to make sense. I guess each individual has to make their decision as to what is sensible, but that seems to me to be the way that our duties would best be served. Be that as it may, I hope I'm not having to make the same comments again next year with respect to this matter.

I'd like to address, first, questions to the issue of the telephone line service program being administered by Mr. Young's department. It revolves around the issue of the 20 percent limit that we have with respect to expenditures in the Heritage Savings Trust Fund in the capital projects division. We're now bumping up against that limit. During the past fiscal year up to March 31, 1987, \$30 million of heritage fund money had been expended on this program, and I'm wondering in a global sense where the minister would see us going in respect of payment for this program. How much is it anticipated that it will cost? What contingency plans, if any, does the department have to pay for these in the absence of any change in the mandate of the heritage fund to go beyond that 20 percent capital projects limitation?

MR. CHAIRMAN: Just before we respond to that question, if I could ask the committee's indulgence and recognize the Member for Lethbridge-West just for one moment.

MR. GOGO: Thank you, Mr. Chairman and members of the committee. It's not often that we have school groups that venture all the way from Lethbridge, Alberta, to the Alberta Legislature, and I would request that I be allowed to introduce the French immersion class from St. Mary's school in Lethbridge who are visiting us today. They're a grade 6 group, and I met with them earlier. They're very impressed with the building that they see before them -- their first visit. I would ask your indulgence that I be allowed to ask these students and teachers and parents to rise and be welcomed by the committee. Would they please rise.

Thank you, Mr. Chairman.

MR. CHAIRMAN: Thank you. I'd also like to recognize some guests in the public gallery and welcome them here this morning. What we're doing this morning is: this is the select Standing Committee on the Alberta Heritage Savings Trust Fund Act. The committee is meeting to review the 1986-87 annual report. With us are two guests, the minister of technology and the chairman of the Alberta Research Council. So welcome as well.

MR. YOUNG: Mr. Chairman, if I could respond to the hon. Member for Calgary-Buffalo, first of all in connection with the 20 percent limit -- in other words, the capacity of that division of the Alberta Heritage Savings Trust Fund to handle more investments of the nature of the individual line service program. I think that was one of your questions, hon. member?

MR. CHUMIR: Yes. It's a package of questions surrounding the reality that we are pushing against that limit. I'm wondering how much more is anticipated. What will be the anticipated expenditure of this telephone line program? What happens, what is your contingency if and when we bump up against that 20 percent limit? Do you have a contingency within your department to pay for that program independently in the event there are no further funds? You may end up obviously halfway through a program and say, "Well, we've got this limit; it hasn't been extended." I would hope you'd have a plan, and I would like to hear about where we stand financially.

MR. YOUNG: Well, Mr. Chairman, I'm going to respond this way. I'll advise the Provincial Treasurer of the hon. member's keen interest in the limits and the divisional structures within the fund. My discussions involving the Provincial Treasurer and others and the decisions that have been taken are that the funding for this program will come out of the Alberta Heritage Savings Trust Fund, and I have not for that reason looked more closely. I'm aware, as the hon. member is, of the limitations and the balances, but the decision has been taken that the program will be paid for in its totality, as far as government is concerned, out of the Alberta Heritage Savings Trust Fund. Now, the hon. member would be aware that we're in the position of having made some announcements about the payments that would be made and the division of funding that would be made. Perhaps I could just very quickly go over those. I don't even have a sheet of data in front of me, although I've got it in my documentation here. But I'll try to go from memory, and if you'll forgive me if I make a slight error -- I don't think I will but...

MR. CHUMIR: Including all the costs, if possible.

MR. YOUNG: I was going to address that.

Let's start with the overall program for individual line service. There are two components. One component deals with the costs which are incurred between the switch and the subscriber -- the local loop it's called. That cost involved additional wiring between the exchange -- and there are roughly 340 exchanges in the province -- and the subscriber. So we're paying for the cost of plowing. Then at the subscriber end the homes have to be jacked; that is, provided with new wiring and the kind of plug-in telephone facilities you would find in urban situations. That total cost was estimated to be approximately \$240 million originally.

When the matter went before the Public Utilities Board that applied for approval of the rate, Alberta Government Telephones at that time estimated there would be an increase in cost. I'm just worried; I think I used \$240 million when I should have used \$260 million here. In any event, when it went before the Public Utilities Board, there was an increase in cost. Now, the increase has been explained as, first of all, more subscribers, growth in the system and, secondly, additional capacity between the exchange and the subscriber. The result of that was an estimated increase of up to \$302 million -- not the increase, but the total amount could be \$302 million. That's not firm, and numbers have been changing. My own view is that there are economies that still can be obtained there and that it should come in at less than that. Now, roughly one-quarter of that cost was originally attributed to the responsibility of the subscriber and three-quarters to government.

The government had announced that the cost to subscribers would be paid off at the rate of \$4 a month or a \$450 lump sum, and for that reason the government announced a rebate of \$110 to the subscriber at the point of conversion. Now, additionally we also announced a program which will rebate the cost of private lines that have been purchased and put in by individual subscribers over time. We do not rebate the cost of the installation but do rebate the cost or the monthly rental charge from April 30, 1986, I believe it is, to the date on which the conversion occurs. That cost is in the order, most likely -- it depends of course a little bit on when conversion occurs, but is estimated to be about \$14 million. There is some uncertainty because there is uncertainty as to the distribution of those private lines in the exchanges and the timing of the conversion of those exchanges. So that cost is a little bit flexible. But that's an indication of cost. Does that help, hon. member?

MR. CHUMIR: Hopefully just by way of clarification rather than another question, is the \$302 million, which is now not firm -- whatever the ultimate final number is, is that the total cost of this program? I thought you started out...

MR. YOUNG: I'm sorry; that's the loop charge. The switch charge is the conversion of the switches to digital. I'm going to use a round number of \$200 million for that. It could be more; it could be less. If I may put it this way, that is a bit of a fictitious number for us to be reaching for, and perhaps I can explain it. Those changes would occur in any event. The telephone company would have to make those changes. So the question is whether it should be attributed to the universal individual line service program or not. It's true that the program couldn't go forward without that capacity in the switches. It's equally true that the company has been for at least 10 years converting switches and was doing so irrespective of this program. So I think there's a clear division, and that's an ongoing telephone company responsibility.

The question at issue, in my judgment, is only whether the company is being forced to do it much faster than it would otherwise have done it. That gets us into what kind of service we want to provide and what would be the responsibility of a company in a very rapidly changing technological situation.

So I really think we're talking about something that is a company responsibility, which it was doing in any event. If anything, it's speeding it up, and it's also building in considerable new capacity and new capability to provide other services. It would have done so in certain areas in any event, because those are money-making facilities, money-making services. I really am concerned only about from the exchange to the subscriber loop, but there are the two components.

MR. CHUMIR: Thank you, Mr. Minister.

Could you perhaps enlarge -- I see in the range of half a billion dollars being spent on this program. I'm not sure what the time parameters are; maybe you could comment on that. But I see half a billion dollars being expended, and I'm wondering just what portion of that money is being expended in Alberta. For example, \$200 million for the switch program: where would the switches come from, how much would be going into capital and equipment that would be purchased outside the province, and how much of this would be going directly into the Alberta economy in these difficult times?

MR. YOUNG: Mr. Chairman, I can't be precise about it, but on the switches, which is apart from the copper or the fibre optics ... Okay? The fibre optics are not manufactured in Alberta, but there is very little of that involved and none in this program, I would suggest. There might be the odd trunk line, but it would be a relatively small amount. The copper: I'm not sure where they get it from. But the switches: I can tell you that about two-thirds to three-quarters of them will be manufactured in Calgary. Northern Telecom has two plants in Calgary. They employ in the order of 1,000 people. Those plants produce the largest volume of switches which will be used here, and as a matter of fact Northern Telecom, from those two Calgary plants, ships switches worldwide. That's their manufacturing base for the kind of switches we're using.

As far as the labour is concerned, obviously all of it is Albertan. The telephones that will go in subscribers' homes, because most of that is obviously the choice of the subscriber, I wouldn't be able to repond to. Some telephones are produced in Alberta; again, Northern Telecom. Does it help you?

MR. CHUMIR: This is obviously a very fine and useful program for those in rural areas. I guess one question I have, however, at this particular point in time, with the difficulties that the agricultural community is going through, is whether or not any thought was given to whether or not there perhaps might be a better current use for the expenditure of \$500 million at this point of time, perhaps by way of a reduction of very expensive input costs for the agricultural community, loan relief, interest relief, additional payments for grain to farmers in need, and similar matters. Could you perhaps comment, Mr. Minister, on your government's perceptions of the merits, the cost benefit of this particular program in relation to other means of utilizing the money to assist the hard-hit agricultural community?

MR. YOUNG: Well, I can respond this way. At the last meeting I was at with rural people, I had two farmers work me over, if I can use that expression for it, for not getting individual line service in faster because they want to connect their computers. They can do it now, but with great difficulty, very great difficulty, and at considerable hazard and expense to themselves. They want to be able to connect their computers to data bases, which they cannot now do, as I say, with reliability and without considerable cost and risk, so that's a part of the response.

The other part of it is that I get many, many requests. I can say I get them daily. I get berated daily because we're not providing individual line service fast enough to meet the needs that some people are experiencing in rural Alberta. That's especially so with small businesses. There are some businesspeople who are trying to develop their businesses and they find it a great difficulty to do so when they're on a party line. They're really forced to individually go out and buy their own line, and that's a very large up-front expense for them.

Finally, I would make the observation that if farmers would be able to attach a telephone answering device to a telephone and receive messages on that device while they were out working or whatever, it may save them a trip to the nearest town or city. Also, if they're able to use a battery operated telephone, they may be able to do gardening and other things and still take their calls, which is something they cannot now do, and all of that I think has a cost to it. Certainly when I was at the conversion of the Mirror exchange and speaking with the farm family who were sort of profiled in that exchange, they told me that it would save them a multiple of the cost just in the gas they burn to go back and forth to town, because there were things they can now do on the telephone that they were absolutely unwilling to do previously. They said, for instance: "How can we talk to our banker on a party line? We just aren't going to do it."

I realize the difficulties that agriculture is having, but I think this would be one of the ways of reducing their costs even though it shows up as a cost in a different -- there is a cost in a different sense.

MR. CHAIRMAN: Member for Athabasca-Lac La Biche, followed by the Member for Lloydminster. MR. PIQUETTE: Thank you very much, Mr. Chairman. I'd like to welcome the minister today, and I'd like to compliment the chairman as well for recessing yesterday's session on behalf of my colleague.

I guess I'd like to begin by indicating that, you know, the single line telephone service for rural communities is very definitely an asset. It's something our party had also recommended during the last provincial election. However, there are a number of concerns I have that I didn't feel the minister or the Premier answered adequately. One was the concern relating to how we are going to be able to fund this conversion. The heritage trust fund portion of the funding: the minister has not indicated how much is supposed to be funded by the heritage trust fund. As pointed out in the last meeting here, we're knocking at the door of the 20 percent capping of the capital projects division. I find it a little bit unbelievable here. The minister is not able to tell us today how that will be funded. What is the plan of the government to fund that project?

Questions that I have here are related to a constituency tour I've just completed. I met with a number of rural volunteer fire departments, and they've asked me to ask this question of the minister. Is the provincial government or AGT considering having a provincewide emergency 911 number in rural Alberta in conjunction with the single line telephone service to better coordinate, for example, rural ambulance service, RCMP, and fire department response to emergencies? At the present time we have various emergency numbers in different localities of the province, and they don't co-ordinate very well the various emergency services provided. I think this should be something AGT or the government should be considering, that we have a provincewide 911 number which would contact the appropriate agencies that respond to emergencies. So I would like to have the minister respond to this, whether this is in the works at the present time.

MR. YOUNG: Mr. Chairman, first of all, I indicated that the funds will come from the Heritage Savings Trust Fund, and I also indicated that the appropriate person to ask about the balance in the divisions in that fund is the Provincial Treasurer, so I hope the hon. Member for Athabasca-Lac La Biche will do that.

With respect to 911 I can categorically say that it is being looked at, number one, and number two, it is not linked to the individual line service program. In other words, if a decision is taken, it will be taken independently.

I didn't bring it down with me because -- sorry -- I couldn't anticipate your question, but I have had briefing just at my request within the last 10 days on the emergency service notification question; that is, the 911 or alternatives. It is expensive. It is very expensive to contemplate doing that on a provincewide basis at the present time. We not only looked at what it would cost in Alberta, but we also looked for experiences elsewhere in Canada and discovered that 911 isn't widespread beyond urban boundaries. In fact, it's almost limited to urban boundaries anywhere within Canada.

So the problem that is raised is really how much we can improve over what we have long had in terms of our ability to quickly notify the right authority in the event of an emergency. That problem remains with us. It's being worked at; I can also advise as to that. But we're very sure that the cost involved is at this time not making it a feasible thing to accomplish on a provincewide basis. We're looking at requests for a couple of rural municipalities, but ones with heavy population densities by the standards of rural municipalities, and it would appear that it's prohibitively expensive even for those kinds of population situations at the moment. As I say, the problem hasn't gone away; it's just that there doesn't seem to be a cost-efficient response available to us at the present time.

MR. PIQUETTE: Perhaps the minister later on could provide us with more technical information why it's so expensive. I was told otherwise by a couple of other people, that it would not be all that expensive, but I guess we'll have to look at the facts if you have some information that you can provide to us. I do think a 911 or a similar number would really alleviate a lot of the problems we find right now in rural Alberta in terms of accessing the right emergency authority.

Another question I'd like to ask the minister here is again relating to a concern in many parts of rural Alberta, and it's in the area of the toll-free telephone system that we have. Presently AGT only provides approximately a 40-mile radius, or to a town or a larger centre which is 40 miles away from its centre. Many parts of rural Alberta do not have access to hospital facilities or a commercial centre where farmers are able to do their business. One of the recommendations that I received from the county of Athabasca, for example -- and I believe the minister has a letter somewhere in his office about this concern -- is that they would like to see their whole county put into a toll-free area, because a lot of the people living in their county have to access their administration, for example, and municipal services, and people have to do that by paying long distance calls. Is the government or AGT considering enlarging the toll-free area in rural Alberta to include an entire county, for example, or a municipality so that a better service would be available? By the way, a lot of people are saying that they're willing to pay the extra service charge to have this kind of service provided.

MR. YOUNG: Thank you. Mr. Chairman, I'd like to respond just very briefly to the earlier question a little bit more. One of the large costs and one of the difficulties with a large calling area for 911 or emergency service is that it must be manned with people who are knowledgeable of the area. That's not too difficult if you have a high-density population and a relatively small area. As one expands the area, it's very difficult to find people 24 hours a day, 365 days of the year, who have intimate knowledge of all of the geographic region. That is a major expense quite apart from the technology and the wiring that goes into it. It's also a major feature of the value of the system, because if the person taking the call isn't familiar, then you lose what you're trying to gain, which is the ability to send a signal to the emergency team so that they get it immediately and they get to the right spot as quickly as possible. That's a part of the problem area, and it may well be that that will be solved by a computer program some day. I wouldn't be at all surprised if we couldn't go a long way on that.

EFRC, extended flat rate calling. Mr. Chairman, the current boundaries are 65 kilometres. We're getting a little off your estimates, but if you're patient, I'm patient. We announced a year and a half ago 115 additional routes. These are not free, and that's the first message that I have to leave with the committee. They are not free for -- I'll identify two major costs from a telephone company's point of view. Okay? Number one, they lose revenue they're currently getting, and number two, the volume increase in calling is not a marginal increase; it's a geometric increase. It's something like -- our experience has been that calling can increase up to six and seven times as much between exchanges as was previously done before the extended flat rate when that occurs. That means that additional capacity has to be built into the system. Almost invariably we have to add capacity before we can add an extended flat rate route, because people perceive it to be free at that point.

I'm going to use a ballpark estimate for you. To the telephone company it appears that the extended flat rate program currently under way with, I suppose we could say, some of what went before is costing in the order of \$20 million a year. You can debate around that, I suppose.

MR. PIQUETTE: That's lost revenue?

MR. YOUNG: That's primarily lost revenue, but there's the additional capacity as well. So it's definitely not free.

The way the system is currently working, we ballot those exchanges which are going to be receiving routes if residential subscribers have to pay more than a dollar additional per month. Now, some of those ballots are not successful. Our telephone calling patterns on a number of exchanges show that if you get 30 percent of the people calling one exchange and 30 percent normally calling another exchange, it is really divided. I do not think that extended flat rate calling is the answer in the long term for the subscriber, because it is forcing all subscribers to pay for a system with greater capacity than many of those subscribers feel they need; in other words, only some subscribers use it. It is leaving the perception that there is no cost to the subscriber, and that's not so. It doesn't appear broken out on the phone bill, but it's added to that base amount. I think we need to be examining a system which creates a saving from the otherwise cost for those who are calling long distance, but to do anything which promotes the perception that it's absolutely free I think is not the way we can go in the future.

Finally, to your point about your county and your county boundaries, I'm quite satisfied that the telephone exchange boundaries are not coincident or coterminous with your county municipal boundaries. You will recall, probably better than I. the history of the mutual telephone systems and the co-ops and whatnot, and our exchanges are based on those boundaries. Until we get digital switches, it would be extremely costly to shift those boundaries around. Even if we could shift them, our experience in a number of communities and exchanges -- in fact, too much of my time is taken up with this -- is that people are more interested in calling to certain centres where they are doing more of their commercial business. I've actually had the experience of -- one of our routes was to a county seat, where it linked the county seat to the school board offices and to the high school, for that matter, and also to the hospital, and I still got criticism because they were doing a lot of their trading in yet a different location, which was outside the exchange and outside the county. So it didn't solve the problem. It solves some people's problems sometimes.

We've got to have a system which is more responsive to the individual subscriber than is extended flat rate and one which carries with it a better matching of cost to revenue from the telephone company's point of view; otherwise the system becomes unaffordable.

MR. PIQUETTE: I guess a lot of farmers in rural Alberta feel they are being penalized enough by living in rural Alberta now that they are facing post office closure and having to pay for a long-distance phone call. They take a look at urban Alberta, where they have a very large toll-free area which extends much beyond the boundaries of a city like, for example, Edmonton. They have toll-free numbers plus they have door-to-door delivery from the post office. So I guess they look at it in terms of the differences.

MR. HYLAND: Mr. Chairman, on a point of order.

MR. PIQUETTE: But I guess I'll go on to the other part . . .

MR. CHAIRMAN: A point of order, please. Member for Cypress-Redcliff, what's your point of order.

MR. HYLAND: I listened carefully to the member's two previous questions. The first part of the first question was on the trust fund estimates, the EFR, extended flat rate dialing, and the 999 issue. I think we're outside -- now we're on to the post office. I just wonder where the cutoff is going to be and the draw in back to the trust fund.

MR. CHAIRMAN: Perhaps we could focus in a little more on the report in front of us.

MR. PIQUETTE: Well, it's on the telephone issue, and it is funded by the Alberta heritage trust fund, at least a portion of the single line service. Now, going back to the single line service, I've noticed that the provincial government has applied through the ERCB and AGT to make it mandatory for rural residents to convert from party line service to single line service, that there's really no option in the matter. On what basis did the government and AGT go from the optional to the mandatory conversion? Because I've been told by a lot of people on fixed incomes that perhaps they would have made the choice to remain on the party line system if they had had the choice. Now, can the minister explain perhaps why this decision was made to go to mandatory?

MR. YOUNG: Yes, Mr. Chairman. And I should update the hon. member. Not only was the application made to the Public Utilities Board, but it was also granted after a public hearing. That decision came down several weeks ago.

So the reasons why this system is mandatory: first of all, we identified substantial savings in cost that could accrue as a result of having a mandatory system and not having a double administration, if you will; secondly, on reflection we realized that the government was paying the largest proportion by far of the cost. Given that the government was paying that large proportion and also given that there were cost savings to be had, we felt it only prudent, as managers of taxpayers' funds, that we should move in that direction. Thirdly, our experience in the conversion of the exchange that was done in Alberta this fall and also the experience in Saskatchewan is that approximately 97 percent of the subscribers voluntarily subscribed for it, so we're talking about a very small number of people who feel put upon in any respect. So I think when we look at all of that and then look at the additional services that it does provide, that's very substantial, because those services will be used and they will be enjoyed by those people.

Finally, as it developed in Alberta, we are providing a rebate, if people pay at the point of conversion, of \$110 toward the subscriber's additional cost over what we had anticipated. If subscribers pay the additional cost, the \$5 per month on a monthly basis -- if they elect to pay that rather than a lump sum, then you can realize that the first 22 months of their payments will be made out of the lump sum that's provided by government. So it does give them a substantial forward time to adjust their budgeting, and it does give some of them a chance to recover from some of their financial difficulties that they've had. I think in all it's a very good package, Mr. Chairman, and there are very strong reasons why we should move in that direction.

MR. CHAIRMAN: Member for Lloydminster, followed by the Member for Lethbridge-West.

MR. CHERRY: Thank you, Mr. Chairman. Mr. Minister, I guess one of the most positive ventures that this government has gone into, in my belief, is the universal line service for rural Alberta,

and I think any rural person would certainly agree that this is such a tremendous step for the rural people. I've heard it said times before that when you look at the telephone service in rural Alberta, with six or eight people on the line -- up to 14 at one time, I guess, but then we broke it down so that we had a much smaller number, and now we are into individual line service. I guess my question to you would be: has the communication on this very positive venture been able to have gone out there? Even today I get questions about when Lloydminster, for example, is going to be hooked up; what about the fees that are going to be charged; and the PUB and that. I wondered, Mr. Minister, if there could be a better way of communicating that to the people. As I say, any of the rural people I've spoken to are very, very happy that it is going to be a reality to them.

So I would just ask you that question: is the communication proper or not, or can we beef it up a bit and have better communication out there?

MR. YOUNG: I appreciate the question, hon. member. I think it's a question which I have to address and that I hope all members of the Legislature will also address.

I think it's been a problem because we went through what turned out to be a longer hearing before the Public Utilities Board than was anticipated. A conclusion by the Public Utilities Board, for reasons that I've given, of the higher cost estimates that were submitted to it was at variance with the government's announced program and therefore we, as government, had to make some adjustments to stay with the announced program, which we have accomplished. We endeavoured to get publicity by going to a rural area and providing some, if you will, fanfare for the start-up of the first conversion. However, it's taken longer than I would like, quite frankly, to get the materials ready that are going to subscribers. Those materials are now ready. The first mailouts went either yesterday or today or Monday --I'm just not sure which day -- which is a letter from me to the subscribers in the exchanges which are going to be the first ones affected.

That will be followed up by a more complete information package and probably a sales package from Alberta Government Telephones. Now, that will be done as we get close to the conversion of a given exchange, but the pattern is that there will be some of that occurring in every constituency within months. So I would hope that individual MLAs have the opportunity to give appropriate publicity, and I think we'll solve the problem relatively quickly now. But you're quite right -- and I recognize the difficulty -- that it's been longer than we would wish getting the first information out. I think the problem will be solved very quickly now. I would ask that as much as you can, I obtain the support and assistance of rural members in doing that.

MR. CHERRY: Thank you.

MR. GOGO: Mr. Young, looking at the universal rural private telephone line service, it would seem that Albertans historically have had access to telephones because oral and verbal communication has probably been as important or more important than almost anything. One wonders, at the outset, why telephone lines weren't laid alongside gas lines when the government launched into its rural gas program, because the cost of lines is peanuts relative to the labour to put them in. However, I suppose that's really not a question that's in order.

One would often wonder, if 10-, 20-, and 30-year planning were ever put in place, with regard to the equipment that is either used or going to be used -- I can't help but think of Vance Packard, who in the '60s wrote the age of obsolescence. People had had telephones for 30 or 40 years with no trouble at all. They'd had fridges with no trouble at all. Now we go into the modern era, where we're so hung up on production we have to build in obsolescence so they cease working within a given period or sales of new products don't occur.

I want to direct a question to that. For example, for many years you could put a telephone in your house, and if you wanted an extension, it was a dollar. The other day -- I'm in the process of moving a constituency office -- they charged a right arm to put in the phone service. Now, after the move, I've asked for one single telephone extension, and it's \$430 by Alberta Government Telephones. The reason for that is with the great technology we have in Alberta, we cannot use a standard telephone. We're into a Trillium system, and because of the microchip design you've got to use this so-called special phone. It makes one shake their head. It doesn't make it easier because it's government money that's paying for it.

The question I have for you, Mr. Minister: do you know, or are you aware, that when the private line telephone service is concluded, whenever that might be, there would be assurance to the subscribers in rural Alberta that the equipment they would use would be good for a 10-, 20-, or 30-year period? In other words, I guess the question really is: is AGT insisting on some new type of equipment to be used with the private line service whereby the standard telephones cannot be used but only a microchip design telephone will have to be used, which will incur some pretty high cost in terms of both the rental fee and the maintenance fee as a result of breakdown?

MR. YOUNG: Okay. Hon. Member for Lethbridge-West, you spoke of planning, and it's one of the really exciting features of this portfolio and particularly this industry. I suppose the technological age we're in is affecting a number of industries: biotechnology and electronics. Communications is largely electronics, and I can't think of more rapid application changes occurring anywhere than I see in the telecommunications field. We're not talking now about voice communications; we're talking about data communications between computers as well as voice. There is a very large amount of research under way, and some preliminary applications -- well, I guess I should say more than preliminary -- of video, picture, as well. So it's a very changed thing from our sort of basic telephone system.

Just to give you one dimension of it, I spent a day with the Siemens company recently. They are spending \$2.3 billion in research in two years in telecommunications. I mean, I can't contemplate how one can spend that kind of money in research, but they're doing it because of the very fast changes which are occurring. My personal belief is that many of these will have very specific application and will not be affordable for most purposes.

But the system that is going in now is a digital system . . .

AN HON. MEMBER: Fibre optics.

MR. YOUNG: Fibre optics in trunk, but not fibre optics in the loop yet. Before the program is done, there may be fibre optics used there, but it's not possible to do that with our technology at the moment in a cost-effective way.

I would be quite satisfied to tell you that the basic data and voice communication can be quite adequately handled by the kind of system that's being put in place now, and for the foreseeable future. Pictures transmission -- that is another question.

MR. GOGO: Supplementary, and this deals with the microchip design and fabrication facilities, Mr. Chairman. I'm constantly amazed at the meetings I attend that have public address systems which appear to be out of the dark ages. They squeak, they squeal, and never seem to work. The most recent one was November 11, and I'm sure the hon. minister has experienced it many times. One wonders, with all these great advances -- and I wonder what the relationship is with the micro design and fabrication facility -- what progress has ever been made in there.

But my question is: under that allocation of \$8 million, of our four universities in Alberta, can the minister advise the committee how those dollars are shared? Because I know many of those dollars in terms of research go to the universities in Alberta. Could you share with the committee, of the \$8 million, just a dollar allocation by university, if you know that?

MR. YOUNG: The Microelectronic Centre -- I should give you a bit of history to it -- is "owned by the University of Alberta." That has a curious history, the history being that at a point in time there was federal government funding available to initiate; there wasn't a catalyst ready to use that funding; the university had a group ready, and that's how it happened to be. In terms of ownership and university involvement in that context, that's something I'm looking at currently.

Now, with regard to the allocation of the funds, I think I've got details with me. But if you will rest with my approximations, because of the fabrication facility at the University of Alberta, the bulk of the funds -- and I would put it roughly this way: about three-quarters of the funding is going into the University of Alberta for their centre and about one-quarter into the design centre at the University of Calgary. Is that the kind of numbers you were looking for?

MR. GOGO: Yes, I was. I understood last year that some had gone to the University of Lethbridge, and I was curious about that, that might be from ...

MR. YOUNG: I don't believe so.

MR. GOGO: A final supplementary, Mr. Chairman. Could I put it to Mr. Bradley as chairman of the Research Council? That would save me attempting to speak again.

Mr. Bradley, regarding the Electronics Test Centre, I recognize that the number of projects you indicated -- some almost 500 -- that have been carried out are done on a toll basis. I understand people pay for having them tested. I don't know what that revenue would be to the centre. But the specific question is that industrial espionage has to be a major factor today with corporations around the world, and I understand that the Electronics Test Centre guarantees confidentiality to the customers that it deals with. Could you share with the committee what steps you take at the Research Council and the Electronics Test Centre with regard to protection of this information? In other words, guards against industrial espionage.

MR. BRADLEY: Yes, Mr. Chairman, to Mr. Gogo. There is a system in place which ensures the security of each individual company's product when it's in the Electronics Test Centre. Now, if I were to describe exactly what they do to ensure that security, I would be revealing what their security system is. They do have in place measures which they use, and every company's product is treated in a very confidential manner as to which company is there, what work is being done. We have to assure that in terms of each company or they wouldn't be using the facility.

MR. GOGO: I was thinking most of the confidentiality by the employees -- that kind of thing.

MR. CHAIRMAN: Member for Stony Plain, followed by the Member for Cypress-Redcliff.

MR. HERON: Thank you, Mr. Chairman. I'd like to address a question to the minister and obtain his response in an area which compares the use of in-house construction crews to that of the private contractor bidding on the ILS program in a competitive tendering process. It's a given that the government-related construction crews are highly visible in rural Alberta to the general public, and probably more so during a period of fiscal restraint and a slower construction economy. And frankly, the sidewalk superintendents in my constituency are highly critical of not only the AGT work crews -- construction crews, that is -- but perhaps some of the areas of transportation, survey crews, and that. They make note of the time that you see so many trucks outside a coffee shop and this and that. I'm wondering if the minister has any comparative output data based on accurate costing data for in-house construction crews vis-à-vis the private contractors.

MR. YOUNG: Mr. Chairman, to the hon. Member for Stony Plain, the point is well taken, but equally much more difficult to provide a response to. It's one that I have pursued, and it's one that is pursued with great difficulty. I am advised, and I know this to be the case, that certain elements of the plowing are done primarily by private-sector contractors. I've even had disputes come to my desk between contractors about details of their contract. I think it is well-nigh impossible to give you, or for me to obtain, a hard set of facts.

I have taken the position with Alberta Government Telephones that they should maximize the private-sector involvement. That not only relates to plowing but it also relates to jacking of houses. Now obviously, if one is a telephone company and is involved with construction crews, perhaps for other reasons, perhaps even working on the switches, and if they can't keep an even flow of switch work, then if some alternative work comes along their preference is to move their crews from one kind of job to another. But I would much prefer them to contract out most of that work. For one thing, trenching, which is a big chunk of the plowing operation, is something which occurs not only for telephones but, as rural members know better than I, for a variety of other services, so that these operators are used to doing more than just working for Alberta Government Telephones, and they have a market which is larger. So that's the position I've taken.

I'm sorry I can't give you hard numbers. I could get numbers on what the average cost per kilometre or something like that is, but that doesn't address the point that is being made.

MR. HERON: Perhaps my supplementary can be more general, Mr. Chairman. Is the minister prepared to project, then, whether there's going to be a shift in emphasis from in-house construction in the years ahead to the competitively bid jobs in the private sector?

MR. YOUNG: Alberta Government Telephones is being instructed to move in this direction. They are having to move in that direction for other reasons. A number of the activities of telecommunications and services which were formerly a monopoly and regulated are becoming competitive and unregulated. And so there is a competitive element getting into a number of features of service that were formerly not so. You are expressing, hon. member, the direction I would like Alberta Government Telephones to go.

MR. HERON: My final supplementary, then, will just briefly applaud the minister on increased communication. My constituency has several of those 340 exchanges, and of course we all compete to be sooner than later in such a worthwhile program.

But in looking ahead at a full implementation of the ILS system and in trying to compare our system to other parts of Canada -- for example, if you're in North Vancouver, they still have places where you have eight to a party line. Does the minister have any benchmark or comparison of how our system, as it is now and will be after full implementation, compares to other parts of Canada or perhaps even other parts of North America?

MR. YOUNG: Well, I think we would have as modern a system as could be found in North America, and especially rural North America -- as good as any; better than a good part. Well, I've had discussions this morning with officials from Manitoba who have announced that they're going to hold public hearings around the province to discuss the potential for moving from party lines to private lines. Now, they're in the process of public hearings before decisions are taken, so obviously we'll be far ahead of Manitoba. We're going to be ahead of certain portions of other provinces as well. As you know, Saskatchewan has a program under way, so I wouldn't suggest that in terms of individual line service we would be ahead of Saskatchewan. I think that both programs will terminate probably about the same time.

In the United States there are rural areas that have a huge number, by our standards, of people on a multiparty line. We have reduced the standard down to four; that's a maximum number of parties on any line. In the United States there are areas where it's twice that amount, and I guess that somewhere there it may be three times that amount. There you have a different structure, a different responsibility for telecommunications, and I would think they will be, in certain areas, many years behind us in getting the kind of service that we're going to enjoy.

MR. CHAIRMAN: Member for Cypress-Redcliff, followed by

the Member for Little Bow.

MR. HYLAND: Thank you, Mr. Chairman. My questions are somewhat along the same line as the Member for Stony Plain. In relating the first question, I've heard the minister speak many times about the technical advancements that we're having in this province in the electronics industry, and I think he outlined it when he outlined the company that's spent massive amounts of money on electronic research. For the capabilities we have in electronic research and engineering in this province, I wonder who is doing the engineering, either the line-laying engineering or the engineering for the switches, et cetera, for this program. Is it in-house or is it private sector?

MR. YOUNG: There are a number of components to a response to that question. If one is talking about the engineering of the switches, I think that engineering is now done at large national or international labs. I'm talking about the main switches which are produced by Northern Telecom, for instance, which is the main supplier, so that engineering generally wouldn't occur in Alberta. Some does, in the sense that they're being manufactured here. There are always some alterations; those switches are styled to the particular exchange requirements. So those requirements have to be forwarded to the manufacturer and then the modifications are made at the point of manufacture, and that engineering is done at that point. As a matter of fact, I met some of the engineers in Calgary who work at that.

If you're talking about the overall design of the system by Alberta Government Telephones, I would think that that engineering must be -- I'm going to take a guess and say it's at least 95 percent done in Alberta, and it may be even more than that. I'm pretty sure it's done primarily in-house in Alberta by Alberta Government Telephones.

I'm sorry; I was thinking of three components of the response and the third one has escaped me, hon. member. Maybe you will trigger me with another question.

MR. HYLAND: Okay. The next question is relating to private industry involved in construction. I wonder, being as we're funding this program, at least the plowing portion of this program, is there any thought given to a method which Transportation used in an announcement of their road grants a number of years ago where if the grant was going to be used by the municipality, something like 80 percent had to be used through the private sector for road building? It caused some problems because some counties had a lot of equipment. Again, when you build a secondary road in Transportation, the department puts the bid out, completes the road, then turns it back to the county under whose jurisdiction it comes. Is there any thought that a way of getting more private-construction involvement in these things is to put the contract out as a department or through Public Works, Supply and Services, contract it, and then turn it back to AGT when the lines are plowed into the ground and/or houses jacked, or whatever?

MR. YOUNG: It would be pretty complex to do that, because we'd have to be working to their standards and their priorities at all points. Even where they do contract work now to the private sector, which is a substantial amount of the plowing, they still have personnel on-site to ensure that those standards and the technical component are up to the quality of Alberta Government Telephones' requirements. So I think we would get ourselves snarled up pretty deeply in contractual relationships which might give contract writers more work than it gives other people in the final analysis.

But what I am doing is asking to see in the reports that come to me the proportion of private versus public that's done or inhouse versus private sector in terms of this contract work, particularly the two areas of the plowing and the jacking. We'll also be looking at that. I think that while it's a question, it's got a point to it, obviously, which will be taken by the company.

MR. HYLAND: I think that being as we talked earlier about bumping up against the upper limit of the program, anything we can do to achieve a reduction and still arrive at a salable and a proper product to the end -- I suppose the only way to do that is to be able to compare. Somehow, as you outlined the problem with getting the proper numbers, being able to compare, is it costing more one way or the other . . . I suppose that's one advantage of those yellow trucks, now white. They stick out pretty easy, so if you get more than one in a spot, the sidewalk superintendents that my hon. colleague talks about are there and ready to make their comment. I think it's important that we get a comparison so that we really know: is it costing us more because we're doing it differently, or could we get it out privately and have more people involved? They would put it in quicker. Rather than eight-hour days they'd work 12- or 14-hour days, whatever it took.

MR. YOUNG: Mr. Chairman, the quick response I'll offer is this. As I indicated in a previous response, I've had some involvements come to my desk because of concerns about the competitive nature of the industry of trenching and cable laying, so I think there is a fair degree of competition there. There are companies in all regions of the province, and if they lose a contract locally and win one further away, I sometimes hear about it as to whether it's the efficient way of doing it. Of course, that's the competitive system too, in part, so there is some competition built in. But I take the points made by several hon. members now to get more work out than in.

MR. R. SPEAKER: Two questions, Mr. Chairman, one for each of our guests. The first one was partly answered. It's technical in nature, and that's with regard to changing some of the service areas where community patterns have changed over the last 20 or 30 years or 10 years. For clarification from the minister: what the minister is saying is that in 1991, when the private line installations have been made and the digital equipment is there -- at that time would you be looking at changing areas, would have the capability of doing it? I understand you have a pilot project that's in place now, testing that possibility. Will there be application of the results of that pilot project, if positive, applied in 1991, or will it be integrated with this individual line service program?

MR. YOUNG: It won't be integrated into the program, but it flows primarily from the switch -- well, first of all, it flows because the individual subscriber will have their own connection to the local switch. But then the other technical component is the digital switch and the capacity of that switch which, while a lot smaller than the current ones, has got all the electronics. It's a minicomputer or a major computer, depending upon how one evaluates computers. It's possible to program it to shift some of those boundaries, if we wanted to do that. I think the minister in the early '90s is going to be the recipient of many suggestions for modifications of boundaries, which will probably be the interesting question of the day. And it should be possible.

MR. R. SPEAKER: You were talking about the planning, and a lot of planning goes into this. Is that inserted into your planning diagram somewhere at the moment, or is it just that you wait and see and you're going to make the decision when you come to that point?

MR. YOUNG: You really make the decision when you come to it. It's a question of having the individual lines so you can deal with the subscriber one on one, rather than having to deal with four as a group, although most of the requests deal with a block of people. But I've got a few that deal -- they're a small group, but there are half a dozen exceptions in the group. So it's made possible because we'll be dealing one on one with the individual subscriber and we'll be able to acknowledge their preferences. It's made possible because we'll have the capacity at the switch and the flexibility. We can add to switches or reprogram switches. And that's really what this is; it's a programming of the kind of switch that's going in now. So it can be adjusted afterward. Thirdly, it requires the capacity and trunking systems, and with the changes that are being made and that will continue to be made, because we're not going to have a static system, especially in terms of trunking capacity, I don't see that as being a difficulty.

MR. R. SPEAKER: Mr. Chairman, my other question was to Mr. Bradley, with regard to the Electronics Test Centre and its relationship -- the one that was mentioned was the Alberta Laser Institute. There was another one; I can't remember the name of the other one the minister mentioned. But do those bodies also have access to some of the Heritage Savings Trust Fund that we make available here through to the test centre? Could you just explain maybe the relationship of the Alberta Laser Institute to the test centre?

MR. BRADLEY: I think the minister referred to a group called the electronics network, which was set up in the province between industry and the various components we have in terms of the Electronics Test Centre and the Microelectronic Centre and the Microchip Design and Fabrication Facilities. So there isn't any direct funding from the Heritage Savings Trust Fund. The only one I'm aware of is to the Electronics Test Centre and the Microchip Design and Fabrication Facilities. But the Alberta Research Council has responsibilities in terms of the management of the Electronics Test Centre. It's managed by a board. There are three members from the Alberta Research Council board on that Electronics Test Centre management committee, and there are also private-sector individuals on that management committee.

MR. YOUNG: If I could supplement. There wouldn't be any flow of heritage funds beyond the test centre. Any other relationships would be on a contract relationship, and there is some interaction. But the others are funded from departmental budget, general revenue, or from the private sector. So no, there isn't any leakage, if that's what your question is pointing to.

MR. BRADLEY: If I could just supplement that further. The Heritage Savings Trust Fund contribution has been for capital equipment in the Electronics Test Centre. There is an annual operating grant to the Electronics Test Centre which comes from the Alberta Research Council's operating budget. MR. CHAIRMAN: The Member for Athabasca-Lac La Biche.

MR. PIQUETTE: Thank you, Mr. Chairman. I'd like perhaps a little bit more information relating to whether there is any interrelationship with Athabasca University here in terms of the recently announced contract between Alberta Government Telephones and the Alberta government over the distance learning development centre to be located in Athabasca. Is that to be funded by the Alberta heritage trust fund? Or is that through general revenues or with a contract with AGT?

MR. YOUNG: The funding of that is occurring from a number of different sources. I'd want to double-check, but I'm pretty certain there are no heritage savings trust funds involved in it. Now, as I say, I don't have the release in front of me today. But Alberta Government Telephones is a participant in that project, as is the ACCESS Network, as is the Department of Technology, Research and Telecommunications, as is Advanced Education, and, of course, Athabasca University. And then there is some private sector as well. But I'm pretty certain there isn't any Heritage Savings Trust Fund there. And at this early stage I could not elaborate, really, on the contributions, other than I know that the ACCESS contribution is intended to be in kind. I'm sure part of Alberta Government Telephones will be, but possibly not all of it. I can't speak for AT & T, for instance, who are a part of it.

MR. PIQUETTE: I'd like to compliment the government in terms of choosing Athabasca University for this venture, because I believe it's a learning system of the future. In terms of going to the individual rural telephone line, I think it's going to make that kind of venture much more feasible in the future in the distance learning concept.

The question I have relates to the Electronics Test Centre we have been funding through the Alberta heritage trust fund. How many companies that are in the microchip or electronics industry have recently moved into the province of Alberta? In terms of diversifying that sector of our economy, has there been a positive influence by the opening of these two centres?

MR. YOUNG: Obviously, Mr. Chairman, there's been a very positive influence. I can't respond in terms of how many companies have moved in as a result of those two or three centres or whatever or as a result of changing market conditions. We have been through a market which has been very slow for integrated circuit type of chips, the kind the Microelectronic Centre makes. That's picking up, however. But I believe, apart from our contact with large companies, by most measurements I would apply, the success of this infrastructure is in supporting the companies that are being created in Alberta.

There's been a tremendous flourishing. I'm making a speech tonight in Calgary, and I don't want to give away the sort of theme line to it, but Albertans generally have what I consider to be an outdated perception of our province. If one examines the economy of this province now and the amount of it that's in the so-called service area -- that's where a lot of this work is calculated for statistical purposes -- you'll see it growing quite dramatically. Part of that reason is that we had a very difficult time for engineers in Alberta, starting in '82-83 with the downturn in the oil sector or even earlier for some of them. They've been very ingenious; they've gone out and started -some of them have made export contacts and exported services and made contacts for our companies to use here. Others have created companies and developed products to replace imports, and some have just simply developed new products. All of that has happened quite quietly, if you will, while everybody's been sort of dragging their butts and worrying. But we should wake up, take a look at what's happening in Alberta. It's quite phenomenal, it's very exciting, and it's very dynamic. The resurgence we're now seeing is going to be much more broadly based than any economy we've enjoyed in this province before because of the dynamics of what has in fact occurred.

We're trying as a department to get better statistics as a base on which to do some planning and have been counting, if you will, and looking at the multitude of companies in place. We started out assuming that -- this was on a contract basis -- if we got 500 companies, we'd have the, if you will, universe of companies; we'd have them all counted up. We've had to enlarge our contract twice because there are far more companies than we ever anticipated in this area of technical development and technology, and I think it's just a sign of what's happening in Alberta. We have a perception -- I'm not necessarily saying the members of the Assembly do, but Albertans generally do -- that we're still resource based, almost uniquely resource based. That just isn't so anymore, and inasmuch as it is so, it's very technologically advanced resource based.

MR. PIQUETTE: Would the minister have any statistics to show how many jobs are related to the electronics part of our economy or the microchip part of the economy? Are there any figures that we have at the present time to justify this great sense of optimism, or are these just perceptions we have at this time that we're moving ahead quite rapidly in terms of developing a...

MR. YOUNG: We're estimating. Now, I have to be very cautious here, because it depends what definitions one uses. But I've already indicated to you that in the telecommunications area my guess is that we have about 2,000 people employed in Alberta today, one way or another, in the manufacture of direct telecommunications equipment of one type or another. This includes two large firms, NovAtel and Northern Telecom, plus some smaller ones. Okay?

In electronics the firms tend to be smaller, but we've got a number of the 40, 50 employment type firms. We're reckoning in the order of 10,000 people in the technological area. But, you know, again I get back to: how do you draw the line? It's growing very rapidly.

MR. PIQUETTE: My final supplementary is more of a question relating to AGT. Previous to this year, to 1986-87, Alberta Government Telephones used to finance its activities by borrowing from the Alberta heritage trust fund. In this current year they have borrowed on the open market, on the Canadian public market system. Have they been quite successful in terms of being able to capture, you know, in terms of competitive rates?

MR. YOUNG: Yes. A three-letter answer will do. The answer is yes, absolutely.

Perhaps I should indicate that if you looked at the electronics -- going back to your last answer -- in a narrower sense, I'm not sure whether we would be doing an injustice by saying 2,000 to 3,000 people in production of those kinds of products as opposed to the larger technology area. Because now you get into the applications of it in the energy industry and in agriculture and all kinds of places. MR. CHAIRMAN: There being no further questions, I'd like to thank the minister and the chairman of the Research Council for appearing with us this morning. We appreciated some very helpful information, some good news. It was interesting that last year, Mr. Minister and Mr. Chairman, you were here for approximately one hour before you were able to answer all our questions. It took a little longer this year, but I think we had some very constructive and helpful comments, in particular on the rural telephone lines. So we thank you for the time you spent.

If there are no further items at this time, a motion to adjourn would be appropriate.

MR. GOGO: So moved.

MR. CHAIRMAN: Moved by the Member for Lethbridge-West that we adjourn. Thanks gentlemen.

MR. YOUNG: I will get you a package of information that's being produced on the telephone lines. We may also be able to find something on the Microelectronic Centre which will assist you.

MR. PIQUETTE: Just one question on proceedings. November 19 is being canceled now, or is this ...

MR. CHAIRMAN: No, Tuesday, November 17 was a tentative tour date. It was suggested that we go to the Syncrude plant at that time. That has been canceled. The date still stands. There's a possibility that we could have the Treasurer on that day, or there's a possibility for another tour, or there's a possibility that it will be a reading day.

[The committee adjourned at 11:48 a.m.]