[Chairman: Mr. Ady]

[10 a.m.]

the existing co-operative sector.

MR. CHAIRMAN: The Chair will call the meeting to order. We'd like to welcome the Hon. Fred Stewart, Minister of Technology, Research and Telecommunications. I note that he has some staff with him, department people. We'll ask him to introduce his people in due time. We appreciate the minister and his department people being here with us today to give us an overview of the minister's responsibility pertaining to the

I might just mention that this department has responsibility for five projects that draw funds from the Alberta Heritage Savings Trust Fund, those being the Alberta Heritage Foundation for Medical Research Endowment Fund – however, we'll be dealing with that this afternoon, so I'd ask members to hold their questions on that until this afternoon – the Electronics Test Centre, individual line service, and the microchip design and fabrication facility. The minister is also responsible for the Alberta Government Telephones Commission, which falls under the investment division of the Alberta Heritage Savings Trust Fund.

Prior to moving on to the balance of our meeting, I would give an opportunity to those who may have recommendations that they would like to put forward.

Member for Edmonton-Avonmore.

Alberta Heritage Savings Trust Fund.

MS M. LAING: Thank you. I have six recommendations.

MR. CHAIRMAN: Thank you. Go ahead.

## MS M. LAING: The first one:

That ministers and others appearing before the standing committee provide a written report with respect to their areas of the Alberta Heritage Savings Trust Fund responsibility at least seven days prior to their appearance before the standing committee and that such report include complete and up-to-date financial documentation with respect to fund activities.

The second one:

That the government of Alberta create an Alberta heritage foundation for research in the social sciences and humanities. A \$150 million endowment fund provided under the capital projects division of the Alberta Heritage Savings Trust Fund would fund basic, applied, and specific research and would be modeled on the Alberta Heritage Foundation for Medical Research.

The third one:

That the government of Alberta create an Alberta heritage foundation for research in the natural sciences and engineering. A \$150 million endowment fund provided under the capital projects division of the Alberta Heritage Savings Trust Fund would fund basic, applied, and specific research and would be modeled on the Alberta Heritage Foundation for Medical Research.

Four:

That the Heritage Savings Trust Fund Investment Committee take steps necessary to effect the return of \$150 million of the \$200 million loaned to Vencap Equities Ltd.

Five:

That the Legislative Assembly take the steps necessary to make the Minister of Economic Development and Trade responsible to the Legislative Assembly for Vencap Equities Ltd. and redefine its purpose as originally intended; that is, to diversify the Alberta economy and create jobs.

And lastly:

That an Alberta co-operative development fund be set up under the Alberta investment division of the Alberta Heritage Savings Trust Fund. This fund of \$100 million would provide a source of capital to help establish new co-operative ventures and to help strengthen

MR. CHAIRMAN: Thank you. Member for Wainwright.

MR. FISCHER: Thank you. My recommendation is:
That greater emphasis be placed on Alberta Heritage Savings
Trust Fund investments that yield monetary returns until such
time as the budget is balanced and the accumulated debt is erased.

MR. CHAIRMAN: Thank you. Member for Westlock-Sturgeon.

MR. TAYLOR: My recommendation is:

That the minister study the economics of making the first three minutes of any phone call within the boundaries of Alberta toll free.

MR. CHAIRMAN: Thank you. Are those all the recommendations this morning? Thank you.

Now, Mr. Minister, it's customary and has been established by a motion in this committee that each of our committee members has the opportunity to ask one question and two supplementaries to the minister. Of course, you may answer them or pass the question on to one of your department people, or you may ask for supplementary information from your department people at your discretion. We'd like to give you the opportunity to give an overview of the activities of your department as it pertains to the Heritage Savings Trust Fund, after which we will move to the question portion of the meeting. So, Mr. Minister, we'll turn the time over to you.

MR. STEWART: Thank you very much, Mr. Chairman. It's a real pleasure to be here; my first opportunity to appear before this committee as Minister of Technology, Research and Telecommunications. I'm pleased to have that opportunity, and I trust that all members of the committee, knowing that I'm a rookie, will give me due consideration.

MR. CHAIRMAN: You're in good hands with this committee, Mr. Minister.

MR. STEWART: Mr. Chairman, I'm pleased to have with me and would like to introduce to you and through you to the members of the committee my deputy minister, Mr. Ken Broadfoot; Mr. Bill Whan, who is the executive director of the department; and Ms Pat Tillenius, who is the ILS manager.

Perhaps I will, Mr. Chairman, attempt to give a bit of an overview with respect to the five areas which you have indicated fall under this ministry. The five programs that you've indicated are either ones that have received funding in the past or indeed are still receiving some funding from the Alberta Heritage Savings Trust Fund. I think it's important to point out that without such funding these programs would either not exist in their present form or would not be able to accomplish the things on behalf of Alberta that indeed they have. So the department certainly acknowledges the contribution of the Alberta Heritage Savings Trust Fund with respect to these initiatives, because I think it really has added a significant dimension to the people of Alberta.

Three of the programs which you have mentioned that this ministry is responsible for but have not received funding from the Alberta Heritage Savings Trust Fund beyond the initial investment are the Alberta Microelectronics Centre, the Elec-

tronics Test Centre, and the Alberta Heritage Foundation for Medical Research. They are still, obviously, providing benefits out there, notwithstanding the fact that the initial investment has gone past. They are continuing to provide, as I said before, benefits for all Albertans and, indeed, are earning returns for Albertans in a number of key areas, certainly in the quality of life and the quality of health care in connection with the medical research foundation and, indeed, increased research and development for the advanced technologies.

The first of the programs that I'd like to mention is the Alberta Heritage Foundation for Medical Research, and I'm sure members will have seen recently the edition of either the Calgary Herald or the Edmonton Journal - I'm not sure which - that gave a fairly extensive account of a number of the achievements that are coming through that foundation. It has over the years drawn capable researchers to Alberta, experts in their fields with world-class reputations. The results of this foundation are just now beginning to be realized, and a number of discoveries and opportunities exist in the real challenge to improve our health care. I would also like to refer you to the most recent issue of Venture because it really does set out again, in detail, the accomplishments, and the challenges actually as well, that are before the foundation. As you have indicated, Mr. Chairman, Mr. E. Geddes, who is the chairman of the foundation, and Dr. Lionel McLeod, president, will be here this afternoon and will be glad to entertain your questions and respond to any concerns that you might have.

I might point out in connection with that foundation that I as the minister am responsible for "the administration of the Act." That's the degree of responsibility that is accorded to this minister by virtue of the provisions of that Act and the order in council designating me as the minister responsible for the administration of the Act.

But there's more to our ministry's interaction with the Heritage Savings Trust Fund than medical research. The trust fund provided capital costs for two other projects which I've mentioned, the Electronics Test Centre and the Alberta Microelectronic Centre. These two organizations are not directly under the department's jurisdiction, but they are a part of a research infrastructure that has been established here in Alberta with which, of course, our department works. The trust fund completed its financing of these two capital projects in March 1987, but the investments are expanding and will continue to expand as part of Alberta's economic base.

The Electronics Test Centre is administered really as a department or a unit of the Alberta Research Council, for which of course our ministry is responsible. It's the only facility in western Canada to provide product evaluation and research support to manufacturers in testing and the certification of electronics products. It received just over \$6 million from the Heritage Savings Trust Fund to pay for those capital expenditures.

The facilities that were built are of course helping Alberta electronics companies enter international markets because of the certification that goes along with the seal of the Alberta Electronics Test Centre. Just a few months ago the test centre added certification from the avionics industry to its impressive list of accreditation which it now has, and I think it's further expanding its ability to serve Alberta industry not only in that area but in a number of other areas as well. It has also achieved accreditation for a number of United States agencies: governmental agencies, NASA, and so on. So the opportunities to utilize the Electronics Test Centre on an international basis

are far greater than they once were.

Up to December 1988 the Electronics Test Centre carried out over 500 projects for Alberta companies; over half of that was repeat business. As well, it carried out projects for companies in western and eastern Canada and for offshore companies. The test centre revenue for the '87-88 fiscal year approached \$600,000, and that represents, I think, about 42 percent of its current operating cost. So it's increasing in that regard.

The Alberta Microelectronic Centre is also not directly under the jurisdiction of the department but, of course, again is a vital member of our research support structure. It helps companies apply microelectronics to their businesses. It received a little less than \$8 million from the Heritage Savings Trust Fund, and that money was used for the capital costs to establish a building and its microchip design and fabrication facilities. These facilities have indeed helped a number of companies attract business to themselves and to the province, and it has resulted in jobs and further revenues for them and hence to the province.

I'll give you a couple of examples. The AMC helped Risley Equipment of Grande Prairie design a unique computer control for logging equipment that is attracting international interest at the present time. Universal Power Corporation of Calgary signed a contract that's worth almost a quarter of a million dollars with a major U.S. electronics firm and is based in part on the technology developed by AMC for Universal Power. Of course, there should be some spin-off benefits for the Electronics Test Centre as a result of these sorts of contracts.

In all, over 200 jobs have now been processed for the university and industrial clients. In addition, approximately 25 people are trained there each year to take their place in industry within Alberta. With its established presence right at the University of Alberta, there are a number of students who interact with the test centre in taking courses in microchip design, and a number of university researchers and graduate students of course have access to the lab itself.

Two of the initiatives currently being financed by the Alberta Heritage Savings Trust Fund are, firstly, the individual line service program. I can say with respect to that program that it's on budget, it's on schedule, and it's halfway through the completion of the whole project. As a matter of fact, a recent news release sort of captured that event when it announced that we have now hit almost 55,000 rural Albertans, 54,815 to be exact, and they now enjoy the same telecommunications benefits that the rest of the province takes for granted.

The Heritage Savings Trust Fund so far, in order to meet this commitment, has paid \$129 million directly to AGT and another approximately \$1 million to ET in respect to the conversion services and to upgrade the equipment so that services can actually be installed. Another \$15 million has been paid directly to subscribers in rebates. When the program is completed, all Albertans will enjoy the highest quality of telecommunications services, and I think this is a fact that's overlooked. Many other jurisdictions throughout North America find Alberta to be the envy insofar as its telecommunications setup is concerned. By 1991 we will have a 100 percent electronic digital system throughout our province. That's the only jurisdiction in North America that can make that claim.

AGT is the fifth area that I'd like to mention. It's the initiative of this ministry which has received money from the Alberta Heritage Savings Trust Fund from the 1970s till 1982. It financed a number of its operations through debentures that were bought by the Alberta Heritage Savings Trust Fund. Since 1983 AGT has financed its activities by borrowing on the

Canadian public debt market with the exception of 1989, when in June of this year AGT offered \$300 million in new debentures. The Heritage Savings Trust Fund bought 200 million of these, bringing the total investment to somewhere in the area of \$1.1 billion to \$1.3 billion. Better than that, we've set it by way of debentures. The money was basically used to finance improvements, modernization, replacing equipment, and upgrading the facilities so that Albertans could enjoy telecommunications services that really are on the leading edge of the world industry standards. The investments are really paying; they're paying off now. AGT plays a tremendous role in Alberta's economy, both insofar as its assets are concerned and, obviously, as a major employer. But, more importantly, I think it extends the nature of what was once a telephone company into a full-fledged telecommunications company in all of its facets. I would suggest that it's really an integral part of the economic development of this province, because without such telecommunications being on the leading edge, you are not going to achieve the degree of ability to meet the competitive requirements of a global marketplace.

So, Mr. Chairman, that's a brief review of what's happening in the area of technology in Alberta through the Alberta Heritage Savings Trust Fund. I know that these benefits will continue to help business, will help employment, and of course it will help the people of Alberta and illustrate it through tremendous provincial economic growth.

MR. CHAIRMAN: Thank you, Mr. Minister, for your good overview.

Although the minister did deal briefly with the medical research endowment fund, it was in an effort to clarify his involvement and responsibility to that fund. The point I really want to make is that we still should hold our questions on that until this afternoon when the appropriate people will be before the committee.

I'll recognize the Member for Westlock-Sturgeon.

MR. TAYLOR: Thank you, Mr. Chairman. My concern, initially anyhow, was the individual line service and the phone setup. I'm glad to hear that it's coming along on budget and, it appears, on schedule.

I had a couple of questions to ask there. The first ties in with the EFRC and the individual line. I don't know; you might say they're slightly separated, but they're certainly rural phone communication. Is there any thought being given by AGT or by your department to simplifying the EFRC? I think any rural MLA will tell you that a good 25 percent of the complaints we get is the fact that you can call C that's way out there toll free and B next door gets a long distance call. I know it's always explained that the signal has to go into Edmonton and bounce back, that there isn't enough volume of calls and that. But that becomes a self-fulfilling prophesy. If you give me free phone calls to London, England, and charge me to call Red Deer, I'm going to call London more often. Consequently, I think the whole EFRC thing is out of whack. So have you given any thought to making the boundaries of EFRC coterminous? In other words, everybody within the boundary can call anybody toll free, not just certain people.

MR. STEWART: Well, Mr. Chairman, of course the matter of the extended flat rate calling areas is beyond, I presume, the parameters of the committee, but I don't mind responding.

MR. TAYLOR: It ties to the individual line.

MR. CHAIRMAN: I allowed the question, I suppose, because of the investment of the fund in AGT. I can always count on the Member for Westlock-Sturgeon to stretch the parameters of the committee a little. So I'll leave it to your discretion as to how much of an in-depth answer you want to give, because it is on the fringes, hon. member.

MR. STEWART: Well, let me just respond, Mr. Chairman, by saying that I think the extended flat rate calling is, in its objectives and goals, just a tremendous thing for the rural people in Alberta to establish a basis upon which they can utilize those frequently used lines to connect them with centres of business, to connect them with the people that they deal with in a medical way, or whatever – the most frequent calling areas.

The difficulty is that it's always difficult when you have to draw lines and to say that one person on one side of the line is within a system and one person that lives a kilometre away on the other side of that line is not within it. What they have to do, obviously, is to look at it from the standpoint of the exchanges. They have to develop something. They can't, for example, go on the basis of counties or other bordering areas that do not make sense insofar as the delivery of telephone services through the exchanges. Basically, it's done on an exchange-by-exchange basis, so when you set out the parameters from the standpoint of getting the boundary around the area that would be included in that program, you're going to find some anomalies come into the system. I think that what AGT has tried to do, and certainly with the Public Utilities Board, that has looked at this very closely, they tried to make out that it's fair; that when a system does go in, because there is a special rate charged for that service, indeed it will, in the final analysis, save money for the majority of the people that are involved in the system. So it's difficult.

I think we will continue to look at ways in which we can improve and remove any anomalies. I'm certainly open to that; I know AGT is as well. It may very well be that with subsequent rate applications adjustments will be made with respect to the program in order to try and improve the service that is available. But it's a difficult problem, Mr. Chairman, just because, as I said before, lines have to be drawn, costs have to be taken into account. And the bottom line is that you've got to try to achieve as much efficiency and as much benefit but, at the same time, make it cost-effective.

MR. CHAIRMAN: Supplementary.

MR. TAYLOR: Thank you very much, Mr. Chairman. Being an engineer myself, though, I'm afraid that it's one of those questions where there's too much engineering and too little common sense going into the solution or when they work it out.

Also on the individual line thing, I asked the Minister of Agriculture, and he in effect said that they transfer pretty well all that over to you: whether or not any studies have been made in view of the complexity of farming and the future use of communications in farming; whether the present electromagnetic system connecting up farmers is good enough; whether we shouldn't indeed, although it costs more, be going the fibre-optic route. What I'm afraid of is that by 1990 or 1991, as you say, we have everything in but it's a system that needs to be torn up again and replaced because of the tremendous advances in agriculture. Are there any studies going on as to really how

much use will be made of those lines 15 or 20 years from now, so that we are indeed equipping ourselves for the future rather than catching up to the past?

MR. STEWART: Well, there is a substantial amount of fibre optics being utilized in the individual line service at the present time, but essentially in respect to high-traffic corridors and certainly through the toll facilities; on local loops they're using the standard type of copper wire lines. So the difficulty, of course, again is a matter of providing service to all Albertans but at the same time being cost effective.

There are certain elements of the fibre optics, obviously, particularly with respect to its installation, that require a greater cost. For example, I understand that to hook up the standard type of service on a conversion would cost a minimum of dollars and can be done in 30 seconds, whereas to do a fibre optics hookup you need, first off, a sophisticated piece of equipment to do it, which I understand costs between \$35,000 and \$50,000; it takes 15 minutes to do each one and so on. So there are a number of cost elements in it, and I guess the whole objective was to make sure that individual Albertans in rural Alberta have access to the same degree of service that is now available in the cities so that they can utilize their telephone service in a multitude of ways. With modems and so on they can hook up for computers; they can have an answering service machine; they can do a number of things now with the service that is afforded to them through ILS. There is a cost factor; there is a time factor; and indeed at this point in time it would probably mean establishing facilities that are much beyond the need. The basis for fibre optics is when you have a very heavy load to deal with, and at the present time it just doesn't seem to be necessary in the local-loop areas.

MR. TAYLOR: My third question is along the line of installation too. I'm sure you've had other rural MLAs call you although construction has been proceeding at a good pace and I think probably with not too much dislocation of noses in that community - if you do what all construction crews are prone to do at times: they get in a hurry cleaning up, maybe causing damage. But what damages that do seem to be caused, AGT more or less uses the line that I can see: "Well, prove it." You know, "See you in court" sort of thing, which is very good for lawyers and for engineers but doesn't do too good for PR in the community. Has AGT thought at all of doing what many other utility companies have done in the past, or even big oil companies, which is setting up a sort of a little arbitration board that people could take their complaint to without going through the price of a lawyer and everything else too, on dislocations and damages that they perceive or think have been done in this rush to put in private lines in the various farms of Alberta?

MR. STEWART: Mr. Chairman, I receive regular reports from the department and through Ms Tillenius of the calls that are received each month by our department from the members of the public in Alberta on various aspects of the program. It's my understanding that the number of complaints of the nature that you're indicating are few and far between, and Ms Tillenius may want to comment further on that. That's my information.

MR. TAYLOR: I must have all the bitchy people in my constituency.

MS TILLENIUS: We get any complaints directly to us.

MR. STEWART: It may be that complaints would go through the Public Utilities Board and then, of course, with its regulatory power it would have an opportunity to address those complaints and deal with them in whatever way it sees fit. It may very well be that there are some matters before the PUB in that regard.

MR. CHAIRMAN: Thank you.

Member for Edmonton-Avonmore.

MS M. LAING: I didn't have my hand up.

MR. CHAIRMAN: I'm sorry. I thought you did. It must have been carried from your hand being up for recommendations.

Member for Calgary-Forest Lawn.

MR. PASHAK: Thanks, Mr. Chairman, and good morning, Mr. Minister and guests. I just wonder if you could elaborate a little bit on the debenture situation with respect to Alberta Government Telephones and its involvement with the Alberta heritage trust fund. I believe you said that these debentures were basically placed earlier in the decade, and just recently there's another \$200 million worth of debentures placed with Alberta Government Telephones. My essential concern here is: why did the heritage trust fund pick up these debentures? Why didn't they go out into the private capital market in the first place? I'm not critical of that happening, but there must be a justification for that, I guess. This may be a second question, but related to that would be: what would be the consequence of the Heritage Savings Trust Fund if it wanted to obtain some capital, say, to deal with its deficit of perhaps floating those debentures that are currently held on the market itself or whatever? I mean, what's the essential justification for this tie-in between the Alberta Heritage Savings Trust Fund and the debentures that are placed or assumed with Alberta Government Telephones?

MR. STEWART: Well, I suppose that the situation – the most recent purchase being in June of 1989, there was a coupon rate of 10.25 percent on that particular debenture that was offered by AGT, and the Heritage Savings Trust Fund took up that particular thing maybe from the standpoint of the yield and the maturity date and other aspects of the security that they thought were advisable for the Alberta Heritage Savings Trust Fund. However, there has not been, as I mentioned earlier, a take-up on the purchase of AGT debentures since - well, with that being the only case since 1983. So essentially they have gone to the public markets for their borrowings. Indeed, the issue that was taken up was only taken up in part by Alberta Heritage Savings Trust Fund. It wasn't a total acquisition of the entire issue of AGT at that time, in June of 1989. So I suppose from the standpoint of the fund, it looks to investment, and if it felt that was an appropriate investment to make and was in the interests of the Heritage Savings Trust Fund, then that was the decision.

MR. PASHAK: Just to get a clarification then. So the investments are made not from the point of view of Alberta Government Telephones so much but from the point of view of it being deemed a prudent investment by the Heritage Savings Trust Fund?

MR. STEWART: Well, as far as the take-up is concerned, AGT, of course, makes the decision in respect to the raising of capital and the requirements of that capital and puts the issue out. It has done so for many years, as I say, and indeed it's

virtually its only basis upon which it can raise capital.

MR. PASHAK: I guess this would be my final question; I don't know. Surely that's not the only basis on which AGT can raise capital. I mean, AGT needs money for capital expansion or whatever, and they make debentures available. They could I suppose, in essence, just put those out in the private capital market to raise money and probably would have been successful getting money there. Is that not correct? It's just . . .

MR. STEWART: What I'm suggesting, Mr. Chairman, is that AGT's avenue to raise capital is to borrow. It issues debentures as security for its borrowings.

MR. PASHAK: They were just as attractive, though. I mean, they would have been able to raise the money just as readily in the private capital market.

MR. STEWART: Well, it just depends upon the terms, obviously. And AGT obviously wants to get the very best terms that it possibly can in its borrowings. It's been successful in that regard in the capital market, as I say, from 1983 right through, except for this one little exception in 1989.

MR. CHAIRMAN: The Member for Westlock-Sturgeon.

MR. TAYLOR: Again? Isn't anybody asking any questions? Okay. I'm sorry, I'm surprised, because usually whether they're pertinent or not, they always ask.

The question – let's go back to the damage claims again then, Mr. Chairman. I'm not satisfied to say that they're not hearing my letters or not getting any of the phone calls from my constituents for their complaints. I get the runaround or told that if I can prove . . .

MR. CHAIRMAN: Hon. member, could you move to the question, please. I believe you made that preamble previously.

MR. TAYLOR: I guess I'm just going after them then, Mr. Chairman. The answer I got I don't believe is right when they said there are no damage claims and there are no complaints from the rural areas, in particular Westlock-Sturgeon. I've got at least two or three that in effect . . . AGT's pleasant, Mr. Chairman. It says, "If you can prove we're wrong, we'll pay," but I don't think our phone users should have to go out and prove that you're wrong. I think there should be some independent arbitration that can be done at no cost that will look at it. I have looked at the things, and as an engineer and as a man who knows something about construction, I think they're quite valid. What I'm getting is a runaround from AGT, either blaming the contractors or go to court.

MR. CHAIRMAN: Your question is?

MR. TAYLOR: My question is: will he check to find out whether their damage claims are there? Their statements that say there's none and no complaints are just plain wrong.

MR. STEWART: None that I'm aware of. As I said before, it may very well be that complaints could have been registered with the Public Utilities Board, who is the regulatory authority, and if indeed that's the case, we could certainly find out whether or not there have been such complaints so received.

I must say, though, that AGT in its operations under this

program makes a real attempt to try and avoid problems before they happen. They hold meetings between their own people with any subtrades and so on to make sure that the contractors are fully conversant with the standards that have to be met in the construction phase. Maybe some of this work that's done in preparation for the program construction being undertaken has helped the situation greatly, too, but I have not received through my office – nor, indeed, apparently through the ILS program – complaints of the nature that you're describing.

MR. TAYLOR: Well, I'll try to personalize it more, because I'm very disturbed that the minister is obviously being shielded by his staff from some very legitimate complaints.

MR. CHAIRMAN: Really, your individual complaints in your constituency – I'm not sure that this is the forum. If there is a general problem, surely it would have come to the department and they would be aware of it. They've indicated that they're not aware of it. I would suggest that as MLA for Westlock-Sturgeon you could handle on a personalized basis those complaints directly with the department. Perhaps you'd have a question that would be more pertinent to the overall operation of the projects the minister is responsible for.

MR. TAYLOR: I think they're pertinent, Mr. Chairman, and I will, of course, draw it to his attention in my own quiet, self-effacing way in the future, so the public can . . .

MR. STEWART: We'll certainly be checking with AGT. They're obviously not here to respond from the standpoint of complaints that they may have received and dealt with on their own, but we will certainly check into the situation to see whether or not there is a more general problem there and even a specific problem.

MR. TAYLOR: I will help you.

Let's go on to the debentures that the hon. Member for Calgary-Forest Lawn brought up. It's a very easy type of thing, and in effect, Mr. Chairman, an excess load handed on to the users of AGT because PUB sets rates as to the cost of money. Now, is the transaction between AGT and the heritage trust fund once removed? In other words, is there an independent party saying that is the cheapest money AGT can get? Because it would be very easy to make the heritage trust fund look like it's earning a good interest on a debenture that could be available at a half or one point less on the public market, and AGT doesn't mind paying it because it automatically goes on the rate base and users of the phone company in effect are paying for what might be collusion to get a fairly high return to the heritage trust fund. Now, are we using any system to make sure that the decision to borrow is vetted through an independent body rather than, "Me and my cousin Mike have worked this

MR. STEWART: Well, in good business practice terms, Mr. Chairman, I'm sure the AGT Commission is doing everything it possibly can in order to acquire capital at the least cost to AGT, and it will for that purpose canvass the marketplace. I don't think there's anything sinister in that. That's their job: to make sure that the acquisition costs of capital are low, just the same as any other expenditures of their operations. They're responsible in that regard, and they're accountable. As to any sort of collusion or arrangement between the Alberta Heritage Savings Trust Fund, I certainly don't think there's any reason to think

that such collusion exists for the purposes that you mention.

MR. CHAIRMAN: Final supplementary.

MR. TAYLOR: I'd like to explore that one a little bit further, Mr. Chairman, because we've seen a fair amount of manipulation like Alberta Housing and Alberta Agricultural Development Corporation paying huge dividends to the heritage trust fund in order to make it look good. How would we know that we're not getting the same type of thing here: an interest rate that's maybe half a point or a point higher than what it could have been on the public market because AGT knows, as does any utility company, that it comes back through the PUB and comes into your rate base? This is why I think the public of Alberta has a right — or we should have some sort of body to show that we got the cheapest rate at the time we sold the debentures to the heritage trust fund.

MR. STEWART: You know that's a very shocking type of thing. If the AGT Commission members were operating on that sort of a basis and not acting in the best interests of the commission, of which they're basically a trustee, I think that would be not well accepted by anyone, and certainly not by this government.

MR. CHAIRMAN: The Member for Calgary-Forest Lawn.

MR. TAYLOR: Don't I have another one?

MR. CHAIRMAN: No.

MR. TAYLOR: I thought I had three.

MR. CHAIRMAN: You've used them. Thank you. I have a record of three questions.

MR. PASHAK: Mr. Chairman, I guess, to follow that up a bit, I just am not quite clear yet as to why it is that AGT goes to the Alberta Heritage Savings Trust Fund rather than to some other private organization for its source of capital. Does it get its financing at essentially the same rate that would be out there in the public, or is there a difference? Are there better terms, or is it just seen by the fund managers that it's good to take those AGT debentures? Well, I guess it's the government that's really issuing the debenture – right? – or the Heritage Savings Trust Fund.

MR. STEWART: The debenture is actually issued by the borrower, namely AGT.

MR. PASHAK: Yeah, right.

MR. STEWART: But when AGT has need for capital for a multitude of its requirements, to keep up with technology and so on, the commission has to look at the capital market that exists and the terms they're likely to have to pay in order to acquire the type of capital they need. They then come to some conclusion with respect to the terms and the amount, and then they put an issue together and test it out there, presumably through some investment dealer that would help them in that regard and give them advice. Then it's up to the Alberta Heritage Savings Trust Fund to say: "Hey, do we want to participate in this particular issue? Do we want to invest

Alberta Heritage Savings Trust Fund moneys in this particular issue?" and it's up to the fund managers, the government in this instance, to determine whether or not they want to participate in that particular issue or not. It's not that the whole thing is created to go directly to the Alberta Heritage Savings Trust Fund. It operates the other way around. They have to acquire capital, and they go out into the marketplace. Sometimes a part or all of an issue may be taken up by the Alberta Heritage Savings Trust Fund, and in other instances none.

MR. PASHAK: That's very good. It's just that quite often we don't have an opportunity to ask, you know, the questions about the mechanics of how these things operate. We're always in danger of losing our questions, though. I just want to say that I appreciate that answer. I'm just trying to look for an explanation. I think you've given it to me.

Now I'd like to just turn our attention to the provision of private line service to rural Albertans. Funding for that has come out of the Heritage Savings Trust Fund, or at least a good portion of it. You gave us some figures earlier, Mr. Minister: \$129 million I think you said this year from the heritage trust fund to AGT to help provide this service. Then you mentioned another figure, and then \$15 million by way of rebate to subscribers. I'm not sure how that impacts on the Alberta Heritage Savings Trust Fund, and I can't really find it through looking at the annual report. Is that money transferred to AGT as the result of the sale of other assets of the Alberta Heritage Savings Trust Fund, and then because of that transfer and the provision of that service - what happens at that point? Is that just an expenditure from the fund which reduces the overall value of the Alberta Heritage Savings Trust Fund? Does that go into deemed assets in some way, or . . .

MR. STEWART: I think you start off looking at the Alberta Heritage Savings Trust Fund from the standpoint of the objectives of the fund and what it's trying to accomplish through a given program. In this case, the provision of this sort of telecommunication service to all of the people of Alberta, no matter where they may live, was deemed to be an overall type of objective of the fund which was in line with its basic principles and goals. So the individual line service program was established, and it was deemed that it would be appropriate for moneys to come from the Alberta Heritage Savings Trust Fund in order to make that happen, just the same as improving the irrigation systems in southern Alberta or whatever. Telecommunications throughout Alberta was deemed to be something that was in the best interests of all Albertans.

So the costs with respect to the Alberta Heritage Savings Trust Fund in the final analysis are projected to be in the neighbourhood of \$225 million, and that represents 75 percent of the total cost; 25 percent is paid by the people of Alberta to receive this service. Now, of the \$225 million that is projected, \$198 million will go to AGT to pay AGT for actually carrying out the conversion work. It, in turn, engages certain subcontractors for certain purposes and so on, but it is the primary body that is responsible to carry out this conversion and modernization.

Another million dollars went to ET because it did a certain amount of work in respect to conversions; \$26.7 million is expected to go by way of rebates to ensure that the cost to individual subscribers will not exceed the \$450 per conversion that was promised when the program was undertaken. Some of those moneys as well are embodied in a rebate to people who

already had gone to an individual line service but are not part of this program. They'd done it earlier and paid the cost themselves, so they're being rebated on a retroactive basis back to May 1986. So that's the way in which the program has operated on a financial basis, and those are the costs that are associated with it.

MR. PASHAK: Thank you. My question – I mean, that's useful information and part of the question I guess I asked, but the other part of it had to do with how that does, in effect, come out of the Heritage Savings Trust Fund. Did we sell off assets so that we would generate some money to transfer to AGT to provide this service, and then does it show back up later on? Is it part of the deemed assets anywhere, or is this just a reduction? Finally, does it represent a net reduction in the value of the Heritage Savings Trust Fund?

MR. CHAIRMAN: Hon. member, I really believe that question could well be answered by the Provincial Treasurer. He'll have that at his fingertips. I think this minister's main objective is to just see that AGT is financed, and it comes down to a decision between the Treasurer, cabinet, and AGT. I think it's a fair question, but it might better be served to the Provincial Treasurer, with your agreement on that.

MR. PASHAK: Okay.

MR. CHAIRMAN: Do you have another supplementary? Edmonton-Avonmore.

MS M. LAING: My question is in regard to, as I understand, the Electronics Test Centre, which is part of the Alberta Research Council. I'm correct in that, am I? I would raise a question, then, in the context of an international move that is looking to the development of peace throughout the world and a concern that we in our technological development become more dependent for dollars and, therefore, on jobs from projects and initiatives that have connections either with military defence or space-related research. I would just have a question, then, as to what percentage or amounts of dollars would this centre be receiving from those kinds of agencies, such as the American military or Defense departments, NASA, and the Canadian Department of National Defence.

MR. STEWART: My information is very, very nominal and very, very low. I could give you a bit of a breakdown which I think is interesting from the standpoint of the projects that have been undertaken by the test centre. As at the end of last year the test centre had carried out a total of 523 projects for 247 Alberta companies. They had 180 projects for 103 companies in western Canada, 94 projects from 66 companies in eastern Canada, and 37 projects for 33 offshore companies. So about 60 percent of their total projects now come from outside the province but mainly, obviously, in Canada.

The electronics industry itself, which of course is the industry that would be utilizing the services of the test centre for the most part, is obviously a young, growing industry here in Alberta and indeed in western Canada, so we would anticipate that as that industry grows, more and more of the projects of the Electronics Test Centre would be involved with those companies here in Alberta and in western Canada in particular.

MS M. LAING: Okay, maybe I could just follow up, and again because I don't exactly understand how much power or control

you have. Would you see raising any concerns if . . . I guess, would you be looking at the kinds of companies that would be coming in in the context of what we are wanting to achieve at an international level – that is, a move away from militarization – and, therefore, in some sense limit the kinds of projects that would be taken on, say, if they were from the U.S. Department of Defense?

MR. STEWART: Well, presumably that would be up to the Alberta Research Council's board of directors. They would make those decisions rather than myself, but essentially I think they are open to consider projects that will enhance the future of the Electronics Test Centre. They're not making judgment calls with respect to those matters, but the fact is that very little comes that way or from that sort of a source in any event.

MS M. LAING: Thank you.

MR. CHAIRMAN: Thank you. Member for Calgary-Fish Creek.

MR. PAYNE: Mr. Chairman, the focus of my first set of questions today is the Alberta Microelectronic Centre. I guess I'm the only Calgary member here today other than the minister.

MR. PASHAK: Well, thank you.

MR. PAYNE: Oh, I'm sorry. We do have the Member for Calgary-Forest Lawn as well. But I'm puzzled why he hasn't raised it, in that case.

I would like to point out to the committee that the Alberta Microelectronic Centre has a design and engineering facility in Calgary. I want the minister to know that we very much appreciate having that facility in the city and would like to suggest that the visibility of the Microelectronic Centre could very well be enhanced in the future in the city. There is no question that microelectronic technology will play an increasing role in Calgary's economic future, and anything that the Calgary members from both sides of the House can do to enhance the centre's activities in the city would certainly be appreciated.

Mr. Chairman, members will be aware, of course, that the heritage fund's investment in the current fiscal year is zero dollars, and that prompts me to ask the minister: how has the Alberta Microelectronic Centre financed its operations now that the fund is no longer directly involved as a funder?

MR. STEWART: Mr. Chairman, in response to the member's question, when you look at the business operations of the Alberta Microelectronic Centre, about \$450,000 are the current revenues for the AMC. Now, that represents about 25 percent of its overall operating costs, so we are, as you will notice in the estimates that we bring forward, still providing operating funds for the Alberta Microelectronic Centre.

MR. PAYNE: Out of GRF?

MR. STEWART: Out of GRF.

MR. PAYNE: Well, then, Mr. Chairman, I think I'd like to raise a similar question to the one I directed to the AOSTRA people when they were here, and that's on the side of commercialization. Does the AMC have a policy or a procedure whereby they attempt to commercialize the research that they

develop? I would suspect there is quite a market for it, and it would seem to me that that's certainly an appropriate area for revenue potential.

MR. STEWART: Yeah, they are obviously looking at every opportunity to expand the opportunities for commercialization for the work they do, and basically the types of things that they get involved with are, firstly, with respect to the development of prototype models that can then be used in industrial use by clients within Alberta and beyond. Then they also do work in just assisting clients, not developing a prototype but assisting them with respect to the development of a new product and, indeed, assisting them in the commercial aspects of the development as well.

MR. PAYNE: I have no further questions, although could I ask, Mr. Chairman, for a clarification? Was the minister speaking solely to the question of AMC research and its commercialization and the technology that it develops as well? That is to say, are both research and technology as developed by the AMC regarded as commercial items, for sale in the marketplace?

MR. STEWART: Well, yes. Particularly with a client coming to the premises, for example, in Calgary, the facility that's there, and they want to undertake – as a matter of fact, when I visited there not so long ago, there were two or three small companies who were in the process of developing new applications. They were working and had been provided with some facilities to work in a confidential way with the Alberta Microelectronic Centre in order to develop the type of process, to develop the types of microchips that may be required, and hardware development as well as the software, in order to make sure that they had something that could find a niche in the marketplace. The Alberta Microelectronic Centre is part of the infrastructural support that is there for those sorts of companies that could not undertake those sorts of things on their own. So it's there as a support service to that sort of industry here in Alberta.

MR. PAYNE: My final supplementary, Mr. Chairman, has to do with technology and research exchange. I assume that in Silicon Valley and in other places in the United States and possibly in Europe there is similar microelectronics-related research undertaken. Is there a forum or a mechanism in place whereby research and technological initiatives can be mutually exchanged to avoid the obvious costs and resource wastage of duplications of research and so on?

MR. STEWART: Mr. Chairman, I don't know the answer to the member's question, and I think it's a good question, because we obviously have to look into all ways in which we can have further collaboration and co-operation so that nobody's reinventing the wheel. Perhaps Mr. Broadfoot might respond to that. I'm just not aware of what sorts of overtures there may have been between places like Silicon Valley and AMC.

MR. BROADFOOT: Thank you, Mr. Minister. It's never as good as you'd like to have it, but just for example, in the past year those kinds of exchanges have been going on between an electronics centre in Ireland, one in Belgium, one in Germany, with some companies in Germany, and definitely with a number of companies in the United States. Next week, I believe it is, the president of the Alberta Microelectronic Centre is going to be in Silicon Valley, and the purpose of that is in part to network more to see what can be brought to AMC for the

benefit of Alberta companies. So it is going on. As I say, I'd like to do it better, but they're doing a pretty good job.

MR. PAYNE: [Inaudible] I would certainly endorse it.

MR. CHAIRMAN: Thank you.

Member for Westlock-Sturgeon.

MR. TAYLOR: Mr. Chairman, this is back to the Electronics Test Centre and microchip design. Are they one and the same, or do you consider them two different projects, microchip design and electronics? It's all one, is it?

MR. STEWART: No; much different.

MR. TAYLOR: How much contract work is done by each of them? In other words, I know you test for people who can't afford it, but then some maybe can afford it. Do you charge fees? Do you do contract work for organizations that probably can pay for it, more senior organizations?

MR. STEWART: Yes, Mr. Chairman, with respect to the Electronics Test Centre - and I have some statistics here which I think are interesting - the Electronics Test Centre does evaluation in testing of products, and those products will vary in a number of areas. For example, some of the new areas that they're heading into: they have recently upgraded their environmental electromagnetic interference and capability test facilities to meet the requirements of commercial and private aircraft. They also do tests for temperatures, altitude, vibration, shocks, crash safety: that sort of thing. They will test products and then also at the same time give advice back to the companies that come forward as to ways in which they can improve in order to adapt better to environmental conditions or many other types of conditions to which the products are going to be subjected. But they do these sorts of testing and evaluation and assessments of a variety of products on a contract basis with a variety of companies.

MR. TAYLOR: Does that apply to the microchip too? Do they do contract work?

MR. STEWART: They do contract work with respect to the fabrication of microchips, and they've got quite an outreach type of program as well, because they're there as a support system for the development of our electronics industry here in Alberta. So they do outreach, they conduct seminars, and work closely with the University of Alberta, where they're now situated. They have an exchange, as I mentioned earlier, of researchers and students, who are on site. So there's quite an outreach program as well as doing contract work with respect to fabrication.

MR. TAYLOR: My final supplemental then. A bit of a preliminary to it is the fact that there have been a number of electronic companies go broke, which always happens when there's anything new under way. Have we been left hung out to dry? In other words, do you have any idea how much our bad debts are on those contract works, our uncollectible debts?

MR. STEWART: I would think very little because most of it's up-front cost. It's after the application and development and ultimate commercialization of it that sometimes they encounter problems.

MR. CHAIRMAN: Thank you, hon. minister. That's the end of the speaking list as I have it. We'd like to thank you for . . .

MR. TAYLOR: Mr. Moore.

MR. CHAIRMAN: Is this to get on the speaking list?

MR. MOORE: No; I was just going to say that if that was the end of the speaking list, I move we adjourn.

MR. CHAIRMAN: Okay. Could I hold that motion for a moment? I'll hold the motion on the floor and thank the minister for . . .

MR. TAYLOR: I'm sorry. I have a question or two yet as long as we're going to go till we exhaust it. If you keep going round and round just as long as we have questions, mine is on the . . .

MR. CHAIRMAN: Just a moment. The Chair now finds itself in a bit of a dilemma in that I assumed we were completed, and there is a motion for adjournment on the floor. I now have the . . .

MR. TAYLOR: We've got plenty of time left.

MR. CHAIRMAN: We have time; that's true.

MR. TAYLOR: My understanding is that we go until the questions are exhausted, that you can't move an adjournment while it's on just to shut off questions.

MR. CHAIRMAN: No; that wasn't the intention, hon. member. I assumed that we were completed, because I didn't have . . .

MR. TAYLOR: I just have this last set, but a couple, I guess, would be all, if I may have the permission?

MR. CHAIRMAN: Would the hon. member rescind his . . .

MR. MOORE: Seeing the hon. member has suddenly found another question and we always honour the Member for Westlock-Sturgeon, I withdraw the motion for adjournment.

MR. CHAIRMAN: Thank you very much, hon. member. Based on that the Chair does not want to shut off questions.

MR. TAYLOR: Thank you, Mr. Chairman. I must admit I turned around in a fit of kindness that the hon. member had a question. Then he immediately moved adjournment.

MR. CHAIRMAN: Hon. member, you don't have a problem, so would you proceed with your question.

MR. TAYLOR: I lowered my guard and wham.

All right; thank you very much. It's a question of the privatization studies that are taking place. How do they impinge or can they impinge on your debenture issue with the heritage trust fund? In other words, can those debentures be transferred to a new owner without the permission of the heritage trust fund, or did the heritage trust fund have a clause, as often happens in financing, that if there's any fundamental change in ownership, the debentures immediately come due and callable, or at least renegotiable?

MR. STEWART: Well, it's sort of an hypothetical type of question.

MR. TAYLOR: Is the clause in there?

MR. STEWART: Oh, I have no idea.

MR. CHAIRMAN: Hon. member, it is an hypothetical question in that you're projecting that if – if – there's privatization, then what if.

MR. TAYLOR: Well, let me rephrase the question. Does the debenture that AGT has with the heritage trust fund have a clause that they're callable if there's a change in ownership of AGT?

MR. STEWART: The debentures of AGT under any circumstances of privatization would certainly not be sold or transferred to any other person. I mean, the whole object would be – as the previous minister has indicated, one of the difficulties that AGT now has is that it's got a very high debt-to-equity ratio. So any move to privatization would not involve keeping those debentures in place but rather probably transferring those debentures, exchanging debt for equity. That's the only way in which you could deal with privatization in such a way as to meet the necessity of some sort of financial restructuring. The telecommunication companies in Canada now have, as an average, a norm of about a 50-50 debt-equity ratio, whereas AGT has about a 90-10 debt-equity ratio.

MR. TAYLOR: That leads me to the second question, Mr. Chairman. He was the one who introduced it, not me. The convertibility of debentures to equity: has there been any thought or study made to convert the debentures to equity in AGT?

MR. STEWART: We are looking at a variety of options, this being just one of a number of options that are available to look at from the standpoint of looking ahead for AGT. AGT itself, as you realize, is much more. Indeed, its commercials on television indicate it's much more than a telephone company; it's a full-fledged telecommunications company which has many facets in its operations. So the matter of the financial restructuring is only one aspect in the whole area of consideration of the future of AGT and the telecommunications industry in this province. The things that relate to competition, technology, regulatory reform, et cetera: all those areas are ones that impact. We will continue to look at all options in order to make sure that whatever happens in the future in the telecommunications industry, Albertans will be right there in the forefront and well served.

MR. TAYLOR: One last one, then, and this is a quick jumpover to the microchip and the electronic processing facilities. When you said you did do some contract work, do you do any outside Alberta and outside Canada? If so, how much?

MR. STEWART: In the AMC I don't know that there are any. The Electronics Test Centre, as I indicated earlier – maybe some through the universities?

MR. BROADFOOT: Some of the western universities.

MR. STEWART: Some through the western universities, Mr. Broadfoot indicates.

MR. CHAIRMAN: Thank you.

That completes your series of questions, hon. member?

MR. TAYLOR: Thank you very much.

MR. CHAIRMAN: Now, the hon. Member for Lacombe.

[The committee adjourned at 11:14 a.m.]