

**Tuesday 1 December 2009- Legislative Council - Government Businesses Scrutiny
Committee - Transend Network Pty Ltd**

LEGISLATIVE COUNCIL

GOVERNMENT BUSINESSES SCRUTINY COMMITTEE A

Tuesday 1 December 2009

MEMBERS

Ms Forrest
Mr Hall (Chair)
Mr Harriss
Mr Wilkinson

IN ATTENDANCE

Hon. David Llewellyn, Minister for Energy and Resources

Ministerial Office

Mr Nick Wright, Adviser

Transend Networks Pty Ltd

Mr Ray Brown, Chairman of the Board, Transend Networks Pty Ltd

Mr Mike Hunnibell, Acting Chief Executive Officer

Mr Paul Oxley, Company Secretary

The committee resumed at 3.13 p.m.

CHAIR (Mr Hall) - Welcome. Minister, do you want to be succinct again?

Mr LLEWELLYN - Yes. I think I am being succinct this time. It is 524 words which is approximately four minutes.

Transend Networks recorded its best-ever service performance in 2008-09. In fact, Mr Chairman, Transend had an outstanding year. As you know, Transend's main task is to transmit electricity and to do that safely, reliably and efficiently. In 2008-09 the company excelled at that task with its best-ever service performance. I would like to expand on this to illustrate the point. On the critical measure of loss-of-supply events, Transend recorded only

seven such events for the year, well below the target of 16 and better than the previous year's results of 10. There were no major loss-of-supply events. In terms of circuit availability, once again the company's performance was better than the target.

These service targets are set and monitored by the Australian Energy Regulator. Transend has consistently performed better than target for several years so Transend's customers enjoy a very high standard of service. Other highlights during the past year included the connecting of the new Tamar Valley Power Station to the transmission system and acquiring the communications services business from Hydro Tasmania. Transend worked closely with Aurora Energy Tamar Valley, the owner of the new gas-fired power station, to connect and commission the generating plant. ATV is Transend's newest transmission customer. The transmission side of the business now has 18 customers including Aurora Energy, Basslink, Hydro Tasmania, Roaring 40s and a number of industrial customers.

Transend's new communication business extends the range of services offered to customers and gives the company another engine for growth. The communications team has an excellent service record and has already made a positive contribution to earnings. Turning to Transend's financial results, profit for 2008-09 was down on the previous year's result despite solid growth in revenue and in earnings before interest and tax. Total revenue grew by more than \$22 million but the growth was offset by an increase in financing costs up \$21.9 million due to the equity withdrawal in the previous year, 2007-08. So it is a sound financial result for the year.

Looking ahead, the recent revenue decision by the Australian Energy Regulator provides a platform for improved financial performance over the next five years. Transend's latest annual report explains what the company is doing to plan for a sustainable future that is clouded by uncertain impact of climate change. They are alert to the potential impact of policy measures such as the Commonwealth Government's Emission Trading Scheme and Renewable Energy Targets. Despite these uncertainties, Transend's 30-year grid vision points to the need for continued investment in the Tasmanian transmission network. Investment will be needed to facilitate the connection for new generation projects to cater for load growth and to ensure that Transend's older plant can be upgraded or replaced in a timely manner.

In summary, Transend is performing well. It has had a solid performance for growth and it has extended the range of services that it offers to the customer. Transend is also taking the initiative to facilitate the development of renewable energy in Tasmania. I certainly would like to congratulate the Transend team on their performance over the past year and I look forward to their performance continuing in years ahead.

I will let the Chairman say a few words.

Mr BROWN - Thank you. As has been noted, I am only two weeks into the job.

Mr LLEWELLYN - Be kind to him.

Mr BROWN - I will just mention a couple of things and probably some of the things that the minister has referred to. The service performance last year was outstanding. We met all the benchmarks that were set for us. As you may or may not have recalled, we have those benchmarks set and if we exceed them we get a bonus and if we are below them we are penalised. We have been in the situation of exceeding them for a number of years now so from an operational aspect we can say the company is operating in a very good manner. At the end of the

day the reliability and security of the system is something that we are custodians of and I think that we do that very well.

Ms FORREST - Should you reduce the target?

Mr BROWN - The target is set by the regulator so it is not for us to reduce or increase it.

Mr HUNNIBELL - The recent revenue reset proposal that we submitted to the AER in there was what are the forward service targets performance measures moving forward. They have actually tightened that up for that very reason to put stretch targets in to make sure that we can continue to strive for -

Ms FORREST - They have reduced it then?

Mr HUNNIBELL - Absolutely.

Ms FORREST - To what?

Mr HUNNIBELL - There are two measures. In terms of reliability the previous 12 months was based on any incident greater than 0.1 system minutes, which I think numbers 16 and that one still stays. The measure stays and that is around 12 incidents.

Ms FORREST - It says 16 here for last year.

Mr HUNNIBELL - That is last year, but moving into the next regulatory period -

Ms FORREST - It will be 12.

Mr HUNNIBELL - Yes, and in terms of the system minutes greater than two system minutes, that is a fairly big measure in terms of making the threshold. They have actually looked at large incidents greater than one system minute and that target is around four. Sorry, the target is around two and the way the performance incentive scheme is measured there is a cap of four system minutes and zero so basically if you exceed four you do not get any bonus. If you do not have any incidents at all you get the maximum bonus.

Mr BROWN - The targets are set independently by the regulator. I think probably as time goes by those targets will become more rigorous. They are very rigorous now but I think regulation will become more rigorous with them but that is for the future. We are in a five-year regulatory period at the moment. That was my next point and the minister has averted to it. We have just been given a revenue decision for 2009 to 2014 from the regulator and we have been given a decision that we are very pleased with. A lot of work goes into the submission for that decision and that in fact was driven by Mike Hunnibell on our revenue reset team and we have been given what we consider to be an adequate decision to provide for our capital program and our opex. As you may or may not recall, we felt that in the last decision we had been somewhat underdone on opex. You could call it catch-up but we think this time it is a better decision, so over the five-year period, as you will read from the notes, we have been given \$606 million in capex spend and about \$254 million in opex and that is over the five-year period.

In addition to that, and Mike might like to comment on this later, there is a \$400 million contingency amount that could be used if things come onto the radar, such as renewables, that we

cannot at the moment foresee. We are quite pleased with the revenue decision. As you know, that is a very rigorous process that is conducted very independently and we are now into that five-year period.

Mr LLEWELLYN - Conducted by mainlanders, too.

Mr BROWN - That is right. The minister mentioned the financial result for last year. Obviously the dividend is less than it had been previously but let's not focus specifically on the dividend. As the minister indicated, there were some reasons for that and one was the additional interest on the equity withdrawal. There was an additional amount that we would have to find under the defined benefit scheme on superannuation, a fairly significant amount of \$7 million and we had a revaluation so we had some depreciation that we had to build in. Other than that, if you looked above the line and if you looked at the EBIT or the EBITDA, the result was in fact better than the previous year but the end cash result that we can pay is less because of those provisions that we have to make.

Mr WILKINSON - You have been slugged in recent years because it has been a good business and it has been run well. There was the \$220 million taken out and transferred to Hydro. There were also high dividends that you have had to pay in recent years as well. I suppose it comes to a state where you are saying, 'We can't afford to continue to be bled because if that is the case there is going to be some danger'. What is the situation with that?

Mr BROWN - If I could make a comment, I would not say 'bled' is probably - I understand what you are saying. With respect to dividends, our dividend regime has been 50 per cent and that has been the regime since day one since the company was formed on disaggregation. I think there was one year where we paid slightly more because of the aberration of an asset we got from Basslink. We paid slightly more that year.

Mr WILKINSON - Your \$50 million return to shareholders in 2007-08 -

Mr BROWN - That is right. We were fortunate, I suppose, that we started with no debt. You just heard from the Chairman of Hydro that they started with debt. We did not and we were fortunate from that perspective. If the point you are reaching is what is left or what is there I can give you a little snapshot if you like. At the moment our debt is \$488 million and somebody on the left will correct me if I am wrong. We can borrow I think 45 per cent of our regulated asset base so our total borrowing allowable is about \$580 million so we have a gap of about \$100 million. In effect we could go to Tascorp and say we want another \$100 million before we have breached our covenant. So that is the gap there. If you looked at it in very brutally pragmatic terms, at what more could we give without breaching our covenant, there is about \$100 million there. Our view about that has been that we would like to have that gap there for anything unforeseen. Whether the anything unforeseen is another equity withdrawal or whether it is something that we do outside of what we have currently planned I guess are two separate matters. There is capacity there.

Mr WILKINSON - There is a lot of capital expenditure that you have to undergo over the next few years, is there not, and that could well eat into that.

Mr BROWN - Mike might answer that but we will get a return on all that capital expenditure over an extra five-year regulatory period, so at the end of that period.

Mr LLEWELLYN - There is an historical context which we loosely talked about a little while ago and that is that it had this disaggregation. The situation was at that time where the Government of the day was looking to sell some electricity entities and Transend, for whatever reason in the disaggregation, was given no debt at all. Hydro was loaded up a little more than what they thought and Aurora was about right I think from a debt-to-equity ratio point of view. I think now that sort of thing redressed, the gearing ratio of Transend is not too much different -

Mr BROWN - Thirty-seven per cent.

Mr LLEWELLYN - from the rest of the transmission businesses around Australia. That is the sort of model which historically we have come from. I should now let Mike have a few words to say.

Mr HUNNIBELL - The capital forecast for the next five years is really about providing investment for what we call the prescribed services which we are obligated as a transmission network service provider under the national electricity rules to provide and that is the \$606 million that Ray was referring to.

Sitting alongside of that, of course, is that in our revenue proposal we do have an allowance for contingent projects totalling around in the vicinity of \$400 million and they are not taken into account in terms of our revenue streams afforded to us or as determined by the Australian Energy Regulator. Those contingent projects are really what we have agreed with the Australian Energy Regulator to be the trigger points for bringing those projects into plan. Generally the trigger points really rely on anything outwardly like new generation and wind farms and those sorts of things that might trigger investments in the State. Obviously we are responsible for the transmission system in the State so we need to facilitate any investment. There is a process that we need to go through. Obviously the investment needs to be justified, deemed prudent, we need to be very transparent in how we source that investment. So there are those projects and given the Federal Government on the CPRS and the RETS associated with climate change, it is going to be interesting over the next period to see what that generates from private investment.

Having a capacity there, there was some discussion about Basslink 2 and because it will be connected to our grid - and that is all it would be, a connection like the first Basslink - obviously we need to be in that space to assess what is the impact on our grid in Tasmania if that were to occur and where does it tap into the grid. So all those things will require additional investment in the network to meet the capital objectives under the national electricity rules but also meet our obligations in terms of a safe, secure, available and reliable supply to our customers.

[3.30 p.m.]

Mr BROWN - Could I just add and it leads me to where I was almost finishing in a sense, talking about Basslink and renewables. We have this process called grid vision. It is the name of something but, as you understand, what it really is, we are taking a 30-year look ahead at what might be required. Within that 30-year look ahead, that might be to do with strengthening parts of the system, properly maintaining parts of the system, but it is also to do with Basslink. We will be looking at the scenarios to do with the second Basslink. We are not promoting that but because it will be connecting to our system, we will need to have some scenarios ready. Otherwise, you will have a situation in four or five years time where a lot of renewables potentially come on-line and where do you send the power. We need to be ready to be able to say, these are the answers to that. So we are not driving the Basslink process but we need to have all the scenarios ready for that and that does take some time to investigate.

The second thing in grid vision is to do with renewables and there is now a process in place whereby renewables might be developed in clusters. So you might have an area like the north-east, which is a good area apparently for renewables, where there are developments in clusters and we need to be ready for that and plan for that to make sure that we connect to them and get the system to them.

So our 30-year vision is very important from that perspective. We are looking at all of those things, not necessarily promoting them but we are looking at that. That is really one of the big challenges I think we will face as a business for the next five, 10 and 15 years. Potential challenges are the renewables coming on-line because the target is 20 per cent by 2020, whatever that turns out to be, and 8 000 megawatts of wind energy of which Tasmania could potentially produce 1 300 megawatts. So for us to get into that space, we need to start looking at that now as to what we can do.

CHAIR - In terms of that second Basslink cable, to basically be able to export?

Mr BROWN - That is right, Mr Chairman, because if 1 300 megawatts is being produced, what is going to happen to it and where is it going to go? We see that as some of the big challenges, moving forward.

CHAIR - Would you then talk to people like CitySpring or others, or is that too far out at this stage yet? There is obviously a significant amount of capex- I cannot remember what the first Basslink cable was. Was it \$2 billion or something like that?

Mr LLEWELLYN - I think I did make a comment on it a little earlier on with Hydro.

CHAIR - We are in another format here now. I just want to see if we get the same answer twice.

Mr LLEWELLYN - I said that it would be obviously something that CitySpring, as an owner of the Basslink cable now, would be interested in. If it could see that there was a potential for a very large amount of renewable energy generated here in Tasmania and the only opportunity then was to deliver that to the mainland network, but the capacity of the current Basslink would not provide for that, then obviously the commercial aspects of building a second link would come in. Not only, I imagine, CitySpring, but other people would be interested in that, particularly if the Federal Government realises, and certainly there is some indication that they do, that in order to reach their targets they probably will have to assist in the distribution of electricity or the transmission of electricity around Australia. There may well be some component of assistance in any new facility such as a second Basslink that would achieve that outcome.

Mr BROWN - I think the position of Transend really is, it is being at the ready. So if somebody comes knocking on our door or government's door about a second Basslink and they say to us, 'What can we achieve?', rather than scratching our head and saying, 'We'd better go and do something on that' we have actually done the work and we are at the ready. How much of 'the ready' is another thing but if we are actually at the ready, we can give some answers, we can give some possible scenarios and solutions, rather than promoting - and we can signal to Government, we can signal to our shareholders that we have done that work, we are at the ready if somebody knocks at our door.

Mr HUNNIBELL - Just to finish that off, in terms of Basslink 2 it is really just another connection, it is another transmission line to the grid. Putting aside the commercialities of funding that, Transend has the vested interest to be directly involved in any potential investment of that nature because it is going to connect to our grid, first and foremost, and we would certainly, through what Ray has said in terms of our grid vision, be the optimum place to land, given the current strength of the system.

CHAIR - Aside from renewables and whether they get developed and in what quantum of time and the export thereof, in terms of demand as it is at the moment in Tasmania, what is the percentage increase? It might have been somewhere in the report but I cannot recall that now. What is the projected increase over the next few years?

Mr BROWN - You mean on wind into the system?

CHAIR - No, just electricity per se.

Mr HUNNIBELL - If you look in the annual report, we have reported on the low grade then we come up with the low, medium and high. Given the uncertainty of GFC and the climate change issues, it is pretty hard to predict the impact of carbon tax on the heavy producers of carbon or byproducts so trying to get a feel for that is pretty hard.

Even in terms of when we put our revenue proposal submission in, we were looking at, with our research, with the people we get this data from, on average of about 1.8 per cent increase in demand. That obviously has come down now, given the recency of events and it is just about under 1 per cent. So we are tentatively looking at around 0.9 per cent per annum over the next 20 to 25 years.

CHAIR - How much does that extrapolate out to in terms of capex or additional new infrastructure for replacing existing infrastructure? Obviously that is there somewhere. Do you have a snapshot of that?

Mr HUNNIBELL - Certainly load demand is directly related to capital infrastructure and it is not about whether we invest, it is about when we invest. This grid vision really paints the picture of these scenarios so that point of investment might shift for a specific project, because we work very closely with Aurora on this in terms of their customers and their low projections so it is directly related to that. But I think it is really a timing issue. That is basically on a pure demand side. Obviously, on the other side, if you have generators connected, that has other investment drivers on our current network as well.

Mr LLEWELLYN - I think it is fair to say from the Government's perspective the potential for a new reusable energy in Tasmania is quite large. Its difficulty is actually getting it to the market or establishing other industrial development here in the State that would absorb that electricity. So Transend are being prudent in looking at a second Basslink cable and it could all happen quite quickly, providing the knowledge that that energy so generated was easily entering the actual market.

The normal predictions that Transend have as far as low growth is concerned could dramatically change as a result of what is happening right at the moment at a national level or what is envisaged from the point of view of geothermal or wind generation in the State.

Mr WILKINSON - Why would you have a second Basslink? Regarding the original Basslink, of course, we are going to export energy and make dollars as a result of that. It has been good because we have been able to import energy and as a result of that our dams have not gone down further than the 17 per cent they reached some time ago.

Mr LLEWELLYN - If we are going to take the issue of climate change seriously, from an Australian perspective we need to look around as to where we can generate renewable energy best that would offset energy that has been generated from fossil fuels or the potential for increases we have into the future. One of the geographic areas that is best suited to that is in Tasmania because we have prevailing winds which enable us to expand our wind generation and we have opportunities for geothermal energy very close to transmission lines and so on. The challenge for Tasmania is getting it to the mainland. If you are talking in terms of gigawatt-hours or megawatts average, at the moment we generate something like 1 300 megawatts average a year to accommodate our major industries and customers. We have an installed capacity in the hydro system of about 2 600 megawatts average. We have wind farms at Studland Bay and Woolnorth. We have projected ones at Musselroe that will add additional energy. We now have a new gas facility down the Tamar that will put in over 200 megawatts.

Mr WILKINSON - It is the export ability then.

Mr LLEWELLYN - Absolutely. If we are to include another 1 000 megawatts of wind energy, for instance, and another 1 000 megawatts of geothermal energy, then obviously we are not going to be able to use that here in Tasmania; it has to be exported. Currently under Basslink we can only export up to some 600 megawatts of energy north.

Mr WILKINSON - Six hundred megawatts per what?

Mr LLEWELLYN - At any time.

Mr WILKINSON - At any one time?

Mr LLEWELLYN - Yes. With that huge amount of renewable energy we would require a capacity to export a lot of that energy into the national grid.

Mr WILKINSON - I suppose the argument at the moment would be because the demand is not there, therefore the prices are not there, you have that to weight up as well, have you not?

Mr LLEWELLYN - Yes, but that is where the carbon pollution reduction scheme and the renewable energy certificates and all those things come into play. If we progress, as the Federal Government has indicated we should, technically Tasmania is an ideal place to produce a large percentage of renewable energy which then has to be accommodated in the national market. That is why there needs to be some assistance, not only here in Tasmania but around Australia, to distribute that renewable energy through transmission systems. In our case there would need to be some strengthening of our transmissions system in Tasmania, obviously, but also a new cable to put it into the network.

Mr WILKINSON - And also depending on what the Federal Government does in relation to benefits as a result of renewable energy.

Mr LLEWELLYN - Yes.

Mr WILKINSON - So they would have to change their policy on that, would they not?

Mr LLEWELLYN - Insofar as what Dr Crean was talking about. He was talking about the anomaly that is there at the moment where solar heating and photovoltaic cells and so on have, by their demand, reduced the levels of renewable energy certificates artificially. I think I heard him say that over time that will address itself but it probably needs another policy decision to be made in order to enable wind opportunities to be taken up at a faster rate.

[3.45 p.m.]

Mr BROWN - Our position is that we will not sit here and wait for those decisions to be made; when they are going to be made or what the decisions are, we need to be at the ready. At some stage in the future there will be a decision about renewables and those types of things. We need to be ready when they are made because if we wait for them to be made, as I said before, if somebody comes knocking on the door and says, 'We're here to do something', there will be too much time lost. So we will do that work. We will spend some resource doing that work in the meantime, to be ready for it.

CHAIR - In the annual report on page 10 you note:

'We received a number of connection inquiries during the past year, and most of the inquiries related to renewable energy projects. There have also been discussions in relation to possible new industrial loads.'

Can you provide any further detail about the nature of some of those proposals and how significant they could be?

Mr LLEWELLYN - In regard to additional loads, certainly there are some inquiries that have been made in respect to additional energy required at Port Latta. There have also been significant inquiries now that are on the public record for a silicon operation which will consume a fair amount of energy also. I think the preference for that company is to use renewable energy. They are the two that immediately come to mind; there are some other, smaller developments that are on the drawing board.

Mr OXLEY - Another one, Minister, that might be worthy of mention was in the news just a week or so ago. That was Norske Skog, which increased its load from 75 megawatts up to 110 megawatts. That is quite a significant increase in capacity from an existing customer, so it is not necessarily new customers coming in such as the ones the minister highlighted, but in some cases existing customers who are increasing or looking to increase their existing loads.

CHAIR - Yes. Also, just to follow on from that, you say on that page, 'Looking forward, we expect a revival of interest from proponents of wind farms' - we talked about that, I think, through the Hydro session - 'and other renewable energy projects as a result of the Commonwealth Government's expanded renewable energy target'. Then you also say, 'Although we welcome new customers, we will continue to alert proponents to the constraints of the Tasmanian power system and the technical matters that must be resolved before we can make an offer to connect to the transmission system'. There are some limitations there.

Mr LLEWELLYN - Again, Mike or Ray might want to comment on that, but I think there is actually a capacity which we believe we could arrive at for new wind generation that would fit

into the Tasmanian grid satisfactorily, or could be arranged from a technical point of view. The projects that are on the drawing board, as it were, from a wind point of view, there are certainly some firm indications of a company wanting to install a substantial wind farm near Lake Echo, and again that has been subject to public statements. There is obviously Musselroe, but I think that has been adequately taken care of because transmission services were being renewed recently into the north-east. There has been now a long-term project down near Smithton to develop a wind farm there, but that is going to rely on the strengthening of the transmission system between Smithton and probably Sheffield. There are those aspects, but I will defer.

Mr BROWN - Thank you, Minister, and I will pass over to Michael the technical parts of it. From our perspective, if you looked at wind up until relatively recently, the traditional thing was that you could incorporate 300 megawatts of wind into the system but if you incorporated any more, the system could not handle it. There has been a lot of work done on that, and I will stand corrected but I think the thinking now is that something like 1 000 megawatts of wind - with a lot of mitigation and a lot of work and processes - can probably be incorporated into the system. So the point about that is that if a proponent comes to us, comes to Transend and says we have a proposal and it involves 250 megawatts of wind or whatever it is, we are doing as much work as we can to be ready for that and we will assist that proponent. We will sit down and consult with and discuss with that proponent what needs to occur and what mitigation factors need to be put in place.

Most of those proponents understand that process; that is the process that we go through. Mike might want to correct me on some of the details.

CHAIR - I was going to ask Mr Hunnibell, through the Minister and yourself, are there any technical issues out there that might put constraints on the system at all?

Mr HUNNIBELL - The main issue, specifically if we are talking about wind, is the inertia issue and its ability to ride through system disturbances. Unlike conventional - in Tasmania that is hydro generation - there is a lot of inertia that sits in around hydro-generation in terms of providing frequency control, providing reactive support which is around making sure the voltage of the system can withstand credible contingencies. Unfortunately with wind that is a bit of a problem. So in terms of wind power generation, you are going to have to manage for a credible contingency. So if you have a large quantity of wind that might jump off the system, you need to have an action; if it is generating you will need to drop load at some point, otherwise you will have frequency issues and you threaten the whole security of the system. So there is the inertia issue. There is additional fault level on the existing transmission network and generators by default feed into increasing fault levels. All our equipment on the system is built and constructed to a certain fault level. In the event of a worst-case fault on the system it can withstand it so there is no damage to the equipment.

If you increase the generation, that increases the fault levels and the impact on our existing infrastructure which we need to look after. That is identifying the problem. We can do things to mitigate the impact of that. I mention frequency control; it has little impact on frequency control.

CHAIR - Conversely, and correct me if I am wrong, but I thought there were some issues with power coming back the other way. Does that cause any issues with the system - stuff coming back across through the Basslink cable with frequencies and that sort of thing? Has that caused any issues?

Mr HUNNIBELL - I think that it was said before in the previous session that generally it depends on whether we are importing and exporting. Transend runs its key network, which is predominantly the 220 kV backbone plus some elements of the 110 kV system which supports the 220 kV system, beyond firm capacity. Generally in a conventional system you might have two transmission lines; if you have a problem, the load on the other line will ride through that so there will be no impact to customers. The issue to maximise import and export for Basslink is that you need to drive the existing system a lot harder and we were afforded to do that with the special protection scheme that we have in place, and there are some commercial arrangements between Hydro and loads, so that we if we are exporting and we lose the link then there is a commercial relationship with loads and other generators. That is the limitation on Basslink. There is a frequency issue there as well.

Mr LLEWELLYN - One thing that needs to be added to that is, for instance, the Tamar Valley Power Station now has a base load of at least 200 megawatts, even though we have standby equipment as well. The more that you can establish the base loads and, for instance, if you add geothermal energy that was in a network, say another 200-300 megawatts of geothermal base load energy, that increases the capacity and ability to put more wind energy into the system as well.

CHAIR - Just while we are talking about wind, I think that Transend expressed some concerns about wind turbines on top of buildings and there has been the controversy here and in Hobart.

Mr BROWN - I think our only concern there was that in running our microwave system there was some possibility of the actual structure interfering with the line of the microwave system. I do not really understand the technicalities, but if you put something in between it, then you break the line or whatever. That was our only concern. It was really simply asking people to address that and be aware of it. So we were not in opposition as such to the proposal. We were passive about it.

Mr HARRISS - You have been going down the track of lots of technical stuff, but this is associated with the finances. Can I come particularly to the superannuation liability which the company carries and primarily, I suppose, the unfunded component of \$35 million out of the total liability of \$46.5 million? That is a fairly substantial increase on the previous year. The total liability last year was \$32 million and total liability this year, \$46.5 million; unfunded last year \$22.5 million or thereabouts and up to \$35 million this year. I have been through the papers previously but that is a fair liability and you would be aware of the State Government's approach to setting aside the superannuation provision account to somehow eat away at the unfunded liability.

Mr BROWN - I might stand corrected but we took over that liability, of course, upon disaggregation. So with those employees who were in the RBF defined-benefit scheme, we took over that obligation. That was funded by funds held at the time and the GFC has had an effect upon the return of those, which has meant that we have had to make an extra provision and that is basically how it arises. The return on those funds is not what it was, so we have to make provision for it.

Mr OXLEY - The global financial crisis has knocked a hole in the funds and we have to top it up.

Mr BROWN - We will carry that liability whilst we have people within the defined benefit scheme.

Mr HARRISS - There has been an actuarial adjustment to that as well of \$8 million, which contributes to that bottom line as well.

Mr BROWN - Yes. The other thing that arises from that is if you drill down on the things, the cost per employee has gone up. That is really as a result of that defined benefit scheme.

Mr HARRISS - Does the company then have a plan or an aspiration, if you like, to significantly expand the funded component of that superannuation liability?

Mr OXLEY - Probably the best way to answer that is simply to look at the profile of the people who are members of the RBF scheme. Over time there will be fewer of them. It just happens that in the past 12 months when we bought the Hydro communications business, we ended up with rather more people in that scheme than we had previously.

Ms FORREST - How many staff did you take on with that extra scheme?

Mr OXLEY - Thirty-one.

Mr BROWN - Some years prior to that we had taken over system control. The same thing would apply.

Mr OXLEY - But over time you will see fewer people in that scheme and that is the reality because the scheme is not open to any new people.

Ms FORREST - Can I go on with that communications business that you bought from the Hydro. I note in your annual report it stated that Transend was the only transition company that relied on an external party commissioning critical communications services to address that. So, I am just interested how it all fits in. I can see why you would want it to be in-house but is there any other benefit to Transend or is that it?

Mr LLEWELLYN - I think there is certainly much potential benefit to Transend in the distribution of the National Broadband Network in the adaptation of the fibre-optic facilities that Transend has on its transmission services. All the new transmission services have fibre-optic cable.

[4.00 p.m.]

Ms FORREST - So you are really looking to branch into that area?

Mr LLEWELLYN - There is a potential there but the fundamental aspect is the security of the telemetry system and the operation of the thing. Some operations of the equipment have to happen in milliseconds or less than that. So you have to be certain that it is available for 99.999 per cent of the time.

Mr BROWN - The minister is correct. Because it runs our system, that is the basic driver. We also had other capacity, optical fibre capacity, so we can lever off that. But the basic driver of it was that it runs our own system and we wanted to absolutely control that.

Ms FORREST - Are there plans to be involved in the rollout of the national broadband?

Mr BROWN - Certainly our group is having discussions with NBN about how we can participate in that. Are there plans? Yes, there are. We are discussing with NBN how we can participate.

Ms FORREST - So do you have the expertise within Transend to fully participate in that or is that an area where you will need to take on people?

Mr BROWN - Michael may be able to answer that a bit better than me.

Mr HUNNIBELL - Certainly we are already assisting NBN in some engineering technical focus. In actual fact we have had some discussions with NBN about ongoing maintenance contracts. The expertise required to operate, maintain and manage the NBN is clearly the expertise we have.

Ms FORREST - So you currently have that expertise?

Mr HUNNIBELL - In the communications business we have the engineering resources. It is a capacity issue; we have the capability to provide advice and if we get into it any more deeply it becomes a capacity issue. Communications, by the way, do provide other services to the Tasmanian Government, for instance for the trunked mobile radio system, which is all the emergency services, police and across that as well as the electricity entities themselves.

Mr LLEWELLYN - Not all of them, just the police and ambulance.

Mr BROWN - So we contract back to the Hydro for their communications.

Mr HUNNIBELL - Communications is based around a digital microwave system and OPGW fibre is a different technology so it also adds diversity in terms of managing our suite of assets that are the prime focus and the prime driver. It provides diversity in terms of reliability as well so there is a good mix there.

Mr LLEWELLYN - Backbone provisions.

CHAIR - Minister, in relation to dividends, we are down to this year \$3.6 million for 2008-09. Do you have any forward projections on what dividends might be in ensuing years and how much of the equity transfer is affected? Obviously it has had an effect.

Mr LLEWELLYN - You can see that the requirement for Transend to service a debt has eroded the capacity to pay money back to the Government by way of dividends. The only thing I can say about dividends is that the policy, as I mentioned in the last two scrutiny checks -

Ms FORREST - It has not changed since then?

Mr LLEWELLYN - It has not changed: 50 per cent is usually the policy of dividend paid back to government.

Mr BROWN - Our projection for this year that we are in is profit of \$17.9 million, so 50 per cent of that will go back by way of dividend. So a rise from that \$3.6 million, I think, to \$8.9 million whatever the -

CHAIR - You are back to about what you were in 2007-08.

Mr BROWN - Whatever the figure is, yes. That is as things currently stand. That is our projection and we would be fairly confident about those figures.

Mr LLEWELLYN - The reset from the AER has improved those outlooks because now Transend is given due regard to some of the things that perhaps they were a bit tight on in the previous five-year review.

Mr WILKINSON - We have touched on capital expenditure - in 2008-09 it was \$130 million, more than double the previous year of \$61 million. It is a significant increase in one year. Can you give us some indication as to why that was the case?

Mr BROWN - I will pass that to Mike but if firstly you look at things we are currently doing, for example, which will provide a spike in the system like the Waddamana-Lindisfarne transmission, which we are renewing and upgrading the substations for at either end, that is \$130-something million.

Mr WILKINSON - That is it?

Mr BROWN - That is a spike. We have other things - and Michael will give more detail on that - but traditionally we have not had trouble but to actually drive a capital program was one of the things that we had to get in place. If you look at when disaggregation occurred, the projection was that we would spend \$500 million on capex over the first 10 years of our life. We about achieved that but initially it was quite hard to drive the program for all sorts of reasons - we were a start-up company and to get projects up and off the ground. Mike can probably the answer the question more specifically but that gives you a bit of an overview.

Mr WILKINSON - Mike, you have been involved with it from the start?

Mr HUNNIBELL - Yes. I think you are right about the big increase certainly this year and last year. Of the \$130 million, \$30 million of that was due to the Waddamana-Lindisfarne line. This financial year that we are currently in there is going to be another \$50-odd million spent on that line and probably \$60 million by the time we finish. The overall capital program is really driven by three key areas from a prescribed transmission business perspective. The first one is augmentation and that project, Waddamana-Lindisfarne \$220 million, is an augmentation project. It provides a second security point into the southern part of Tasmania. We are very vulnerable in the southern part of Tasmania and we are heavily reliant on generation from the Gordon hydro in terms of provision of real power megawatts as well as reactive power for voltage support. This project will go a long way to manage the security issues in the south so we will have two injection points. That is augmentation.

Secondly, the other major component is the work that we do on a yearly basis with Aurora and that is the annual planning review where we really sit down and talk about constraints and bottlenecks in the system that we might need to manage but also Aurora are driven by the local regulation or the OTER currently. It is due to go under Australian Energy Regulator the same as

us at its next determination. They have also got prescribed reliability performance measures that they need to manage as well. That leads into additional connection points on the network so they minimise their risk in terms of impact if we lose a particular connection point.

There is the augmentation, the connection points which can be driven by load or it can be driven by reliability and, thirdly, of course is our renewable program. As you know, any asset has a service life and obviously we manage those fairly closely and on a proactive basis so that we can replace those when they are required to be replaced. Generally, they are the key drivers and basically the change in capital profile is really based on when the timing is required for those drivers to come into play.

Mr WILKINSON - What is the projected expenditure, say, for this current financial year? We have gone from \$61 million to \$130 million.

Mr HUNNIBELL - Regarding the current projected expenditure, we did budget for around \$165 million and that has now been reduced to our latest - we are just under review on that - so around about \$143 million.

Mr WILKINSON - And the following year after that? Have you got a three-or four-year program?

Mr HUNNIBELL - Yes, \$157 million for 2010-11 and then it drops down to \$93 million, \$98 million and \$98 million, so it goes up. It is really impacted by the Waddamana-Lindisfarne project, which is due to be completed in December next year. After that project has been completed then it will probably get back to a normal profile.

Mr WILKINSON - Are there any other major works planned for this year other than the Waddamana line?

Mr HUNNIBELL - There is a connection point that we are currently building for Aurora at Mornington, which is a new connection point that just sits out not too far from our Lindisfarne substation. That is there to bolster supplies down south. The other major one is the two network transformers which are our biggest transformer types. That is at Burnie and they are 220 kV to 110 kV. Generally you are talking about up to a \$3 million bit of equipment there that might take 18-19 months to manufacture and deliver.

It is not just one project in one year; a lot of the projects do go over a number of financial years but certainly there are a lot of renewal projects - Emu Bay and Port Latta - replacing end of service life, unreliable equipment on the network, so there are a lot of the replacement programs that are kicking in at the moment as well.

Mr WILKINSON - Were there any major blow-outs in budgeted capital works that you performed and, if so, what?

Mr HUNNIBELL - In the last 12-month period, no. Everything was run to plan. We have a fairly rigorous estimating process in place now so we capture that data. We have good benchmarks, we have good data from the industry but also from previous projects in terms of benchmark costs and those sorts of things that we can picture pretty well.

Ms FORREST - Where is most of the equipment you manufacture that you need to upgrade?

Mr HUNNIBELL - Transformers are probably the only bit of plant that are manufactured in Australia. There are two plants that manufacture power transformers - the ones that we use. We have a period contract with a manufacturer in Melbourne for the supply of transformers which are the ones we interface with Aurora for the next five years. Generally for the bigger units we go offshore and mainly that is due to competitiveness in terms of pricing but in terms of switch gear we source from the United States, we source from Europe. Generally and mainly it is in Europe and the States.

Ms FORREST - On a slightly different tack, with regard to the impact on business or industry of transmission costs, we have been informed that the transmission costs have gone up 30 per cent in the last year and are set to rise again. Some would suggest that would make certain big users unfinancial or uncompetitive. What is your take on that impost?

Mr HUNNIBELL - Ask the minister first, I think.

Laughter.

Mr LLEWELLYN - I could answer the same way as I did before in regard to the issue. Obviously the reset from AER has given a little bit more capacity for Transend to properly absorb some of the costs and those costs have to be transferred onto customers.

But in the statement that I gave in regard to when we had the Hydro, I mentioned that any increases in regard to that, particularly to our concession holders, that might move through the system as a result of these things, will be absorbed by Government CSO readjustment so as they do not suffer -

Ms FORREST - Totally absorbed?

Mr LLEWELLYN - Yes.

Ms FORREST - So 30 per cent plus another whatever.

Mr LLEWELLYN - No, I am not talking about the 30 per cent, I am talking about the -

Ms FORREST - That is the transmission cost that has gone up 30 per cent.

Mr LLEWELLYN - The transmission costs are only one part of the total package of costs in the system but I did say:

'We will continue to ensure that residential customers are protected by a robust independent price regulation' -

this is from the Hydro's component as well -

'and in line with yesterday's announcements on water and sewerage, they become permanently indexed concessions to future price rises to insulate those Tasmanians already entitled to concessions on their electricity bill from future price pain.'

Mr BROWN - Could I add something, Minister?

Mr LLEWELLYN - Yes.

[4.15 p.m.]

Mr BROWN - In the process there are two types of customers - we only have one type of customer - but if you look at residential, they are really via Aurora and their component of the transmission is 14 per cent so of their bill. Then there are the MIs, where it is a much larger component. If you look at the process we go through to make our revenue application, when we make the application it goes in as a draft application. We are seeking a certain amount of capex and opex and obviously that is going to have some effect on prices. The MIs and the group that represents the MIs have the opportunity to make a submission to the draft application and the Energy Regulator will take account of their submission. It is not a situation where the revenue reset comes out; the prices are set, the MIs are lumped with them. They have an opportunity throughout every part of that process to make submissions on the adequacy of our -

Ms FORREST - And the AER reset a structure recently, as you said, then the Australian Competition Tribunal made a decision that allowed further increase -

Mr LLEWELLYN - No, I think there was a merit case from the initial response by the AER. There were a number of companies that were concerned about the AER not taking into account average costs of capital and other issues such as that so there is a process to assess the merits of their decision. We went through a merits case and I think from a Transend point of view and those other companies that supported that case their submissions were vindicated and there was an adjustment made on the original AER decision.

Ms FORREST - So how will that decision impact on the energy users?

Mr LLEWELLYN - There was a bigger allowance made for the considerations of transmission, opex and capex and so on, than originally would have been made. AER would initially have squeezed the system more than what happened in the end and any adjustment upwards is reflected in customer prices.

Ms FORREST - So you still think you can mitigate those - and I know it is not a huge amount, I appreciate that, but for the end users and residential customers, eventually it flows through, does it not?

Mr LLEWELLYN - Yes, it does, but we have made the statement we have with respect to the end use.

Ms FORREST - That is a government matter about how they are going to fund all that?

Mr LLEWELLYN - Yes.

Mr BROWN - The decision is fairly recent. We have the decision and we are analysing it. We did feel that we were underdone and, as the minister referred to, there were other TNSPs who joined in that appeal -

Mr OXLEY - Transmission and distribution companies. There were four companies in New South Wales that received revenue decisions from the Australian Energy Regulator at the same time we did and we all had the same argument with them over the cost of capital.

Ms FORREST - So mostly capital expenditure as opposed to operation expenditure was the issue?

Mr OXLEY - No, it was nothing to do with operating expenses or capital expenditure; it was to do with cost of capital and the parameters that give rise to that decision. We, along with TransGrid in New South Wales and a number of distribution companies, said that they got that decision wrong in respect of that particular attribute and the tribunal agreed with us. As Ray said, we got the decision just the other day and we are now having a look at it as to the impact on our customers.

Ms FORREST - I assume then that you always had the capacity to say, 'No, that's still not enough', or was the tribunal's decision final?

Mr OXLEY - The tribunal's decision was final.

Ms FORREST - So you just have to work within that.

Mr LLEWELLYN - The capacity is there for Transend to work within that ambit that has been given up to the point that they have agreed. It is a decision that Transend would make as to how much of that capacity is carried through to the customers, but they have not looked at that in detail at this stage.

Ms FORREST - Can anyone appeal the decision?

Mr OXLEY - Yes. In fact, a number of other parties applied to the tribunal to contest the decision by the AER. For example, the Energy Users Association made an application, so too did Nyrstar, which is one of our customers. The regulator's decision is open to -

Ms FORREST - Can there be a challenge of the tribunal's decision? Can they go to the Federal Court or anything like that?

Mr OXLEY - As far as I am aware that is the end game.

Mr WILKINSON - A couple of years ago there was some talk that Transend was and still is a very good business; if you wanted to put it on the market there would be a couple of people out there willing to purchase it. You can probably remember the same type of question a couple of years ago when we were dealing with Transend. Has there been any further discussion or consideration given to the possible sale of Transend?

Mr LLEWELLYN - As I said previously, in a statement I made earlier today the Labor Government remains committed to public ownership of the Hydro system and the transmission and distribution network.

Mr WILKINSON - That must be a fairly new policy from Cabinet, Minister, is it?

Mr LLEWELLYN - No, that is the old policy.

Mr WILKINSON - So people can rest assured that there is no intention at this stage to sell Transend? That is the bottom line?

Mr LLEWELLYN - That is right.

Mr WILKINSON - Wind turbines on buildings.

CHAIR - Done, Jim, you were out at that time.

Mr WILKINSON - Done. I know that Robert Rockefeller was talking about -

Mr LLEWELLYN - The answer was that we were really only concerned about the position of the wind generators that might shadow, from an electronic point of view, the microwave system that is on top of the Hydro building or on top of the Marine Board Building or whatever and the path that those microwaves take. We do not want things in front of microwave systems because they block the microwaves.

CHAIR - Might I say that is the same answer as before.

Mr WILKINSON - That is the same answer as when I was away. I should have taken my TV with me.

Mr BROWN - I think that ours was more a representation, you could call it an objection, it was more of a representation that 'this is going to have some effect on us and you may need to change things or we may need to change something of ours', but we were passive about the actual proposal.

Ms FORREST - Are you saying that it would have an effect or you thought there may have been?

Mr BROWN - I think there was going to be an effect. It had been calculated that it was going to cut across the line of the microwave system. The microwave system is a line of sight thing and if you put something in the middle of it you break the line.

Ms FORREST - It is like the wind turbines and the orange-bellied parrot flight path.

Mr WILKINSON - That parrot pops up in a number of different areas, doesn't he. Wherever there is a development.

Mr LLEWELLYN - They are all okay, those orange-bellied parrots. They fly very close to the ground and wind turbines are much higher.

Mr WILKINSON - If this question was asked before, please stop me. You talk about risks. What are the biggest risks facing Transend in the coming years?

Mr BROWN - One of the big risks is the regulatory risk. We have just gotten the revenue determination for five years so in a sense we are over that. But the next five years or whatever period it is will come up relatively quickly. So the regulatory risk is the largest risk that we face. You might say there are other risks but I think the regulatory risk is the one that we need to deal

with and deal with properly to make sure that we get our capex program up. Mike or Paul might want to comment on that.

Mr HUNNIBELL - No, I think that is right. Every two years we do a fairly intensive business risk review and we do risks based on a gross risk and then a net risk based on the mitigating actions that we build into the normal business operation or business. That operates every two years and the big ticket ones - things like third party consequential damage to major furnaces and those sort of things - are already sorts of things that we need to be mindful of. That is why we need to make sure that our operations and maintenance and all those aspects are not short-changed to ensure that we can prudently show that we have demonstrated duty of care to managing those assets.

Mr HARRISS - Picking up on risks, if I go to the annual report on page 11 where you talk about connection inquiries that the company had received, you make the specific comment that you welcome new customers but you will continue to alert proponents to the constraints of the Tasmanian power system.

Ms FORREST - We did this one, too.

Mr HARRISS - Did we?

Ms FORREST - Yes.

Mr HARRISS - My apology, I wasn't concentrating. Don't worry about it, I will look at the *Hansard*.

Mr BROWN - It was asked in a different way, but the answer will be there.

Mr HARRISS - Thanks.

CHAIR - Another one, if I might - and that may have been answered, too. Obviously with blackouts, Aurora have problems at times with trees across lines, and all sorts of things. In terms of your transmission lines, have there been any significant outages this year at all?

Mr BROWN - I do not think there have been any significant from that perspective, and that is reflected really in our safety performance in the outstanding, as other people have used that term, safety performance. So there has been nothing of note.

CHAIR - So have you - and Mike might be able to answer that - in those 220 kV lines, do you ever have a breakdown in those at all? Has it happened in the past?

Mr HUNNIBELL - Generally the 220 000 volt system is very robust and resilient. That is the newer part of the network. The 110 kV system has evolved over a period of time. One of the biggest areas of the potential, and that is coming back to some of the risks, you only have to see what is happening in the inquiry in Victoria into bushfires, for instance, and obviously managing 10 500 hectares of transmission line easements that we need to manage. In the past, we did have problems with trees growing or falling onto lines, so we do make sure we have a very proactive management plan in terms of managing the vegetation in and around the vicinity of our transmission infrastructure. So we try to eradicate that as a cause of problems.

CHAIR - I know you have cut down some trees on our place. I think that easement is about 40 metres either side of the line of the centre wire, or something like that.

Mr HUNNIBELL - Generally for a 110 kV system it is 50 metre easements, so 25 either side, and for 220 kV it is 60 metre easements with -

CHAIR - That is why more of my trees got cut down.

Mr BROWN - I think the human factor may well be the largest factor. Some years ago a tower was pulled down by a farmer pulling a plough, or something, and the plough got caught up with the transmission tower.

CHAIR - He pulled one of those big ones down. By gee, it must have been a good tractor.

Mr BROWN - It was 110 kV.

Mr WILKINSON - That would be a concern, would it not, especially this year with the growth we have had. The fires, I believe, are going to be a problem.

Mr BROWN - Yes, it is, and we are going to do as much consultation with the land owners as we can, notifying them of the possible things that might happen. So it is of concern to us. As Mike said, the fire mitigation factor is a concern to us; we have been into that in depth. We do a lot of work on ensuring the line is clear; you will never do everything you can but we do as much as we think we possibly can. As I say, the human factor is probably the factor that will bring you undone occasionally; somebody might fly into a line, for example.

Mr LLEWELLYN - Crop dusting, and that sort of thing.

Mr WILKINSON - Has anything been learned as a result of the Victorian fires in relation to the transmission lines?

Mr HUNNIBELL - Not specifically to us. I have not read the full outcome of the inquiry, but we recently had our bushfire mitigation process and management plan independently reviewed by Marsh and they have given us a good ticket. They came and looked at our processes, looked at our past history and all that sort of stuff, and we believe we are proactively managing that. I think, Jim, in relation to your comment about the recent rain, growth rates in vegetation vary depending on geographical region, and to assume growth rates are consistent right across the State is wrong. We have learned from that previous history, but leading up to the summer season we will do some helicopter fly-bys to ensure that nothing is really out there that is going to bite us in the summer period.

Mr LLEWELLYN - I think not last summer but the summer before there were some concurrent events that occurred in Victoria which created quite a serious blackout situation. One related to very high temperatures on the day and the sagging 220 kV lines, I think they were, and a bushfire that went under the lines at the same time and it tripped in conjunction. I think that was at the time when Basslink tripped as well. So it might have only been last summer. The South Australian link went off at the same time. So it was a fairly substantial blackout.

[4.30 p.m.]

Mr WILKINSON - Talking about that and the fires, obviously in the overhead wires, I know a good mate of mine kept saying, 'What have you done? You have not even taken the overhead power lines out from the view looking over the water.' It brings up the question, underground or overhead. Have there been any changes or increased use of underground as opposed to overhead?

Mr BROWN - I can answer that partly and the answer is no. The cost factor is still the same, still quite substantial. I will talk about the least cost, most technically efficient, but I should pass those technical terms over to Mike. That is not to say that there will not be circumstances in which we might make a decision to go underground, which might shorten the planning process, it might shorten the objection process and it just may make sense. You might recall, we went underground for part of the Trevallyn line. We were forced underground through the process. So it is not to say that in the environment we are now in there might be circumstances in which we go underground. The cost factor is still substantial.

Mr HUNNIBELL - I think it is compounded in terms of if it is an augmentation or a development requirement, the planning schemes can impact grossly in terms of timing. There will be a point where you will need to assess from a cost perspective. As Ray mentioned, we are obligated under the national electricity rules to come up with the least cost, most technically acceptable solution. That is good in ideology but you do run into planning issues. We spoke about parrots before, but there are wedge-tailed eagles, for instance. You cannot construct in the vicinity of one or two kilometres or build infrastructure within the vicinity of nesting birds. We work very closely with the Aboriginal heritage people. All these things come into play, not to mention that things like transmission lines cover a number of different councils with different planning schemes. So it is another factor that is starting to become quite significant in terms of hitting deadlines for projects. Then I think there is a best-cost risk benefit in terms of how far do we push down this without doing something and what is the ultimate impact to end users.

CHAIR - Can you extrapolate that out a bit further? What is the comparative cost of overhead and underground, per 100 metres? You would think that having to put big steel towers up and everything else would be significantly more expensive. I do not know, with high voltage, you probably have to go down a couple of metres. I do not know what you have to do.

Mr LLEWELLYN - No, it is the insulation.

CHAIR - The insulation is huge, I have no doubt.

Mr HUNNIBELL - It depends on the voltage. Cost is directly related to voltage. Insulation is an issue. But generally, I think it was reported previously that the cost for C grade was 14 times. I think it is more in the order of five to six times.

CHAIR - Yes, it is significant isn't it?

Mr HUNNIBELL - Yes.

Mr BROWN - If we do that we will not get paid for it. In the current capex environment we have some capacity to do that without it being looked at and us not getting paid for it, but the capacity is not limitless. We would look at it in circumstances where, to go through the process of getting overhead and dealing with objections and the time involved, we may make a decision at the start that it is going to be more cost-effective in running our business to go underground. But

it is has to be short stretches and it is not going to be a Waddamana-Lindisfarne line because that would be absolutely prohibitive.

CHAIR - Yes, I understand that.

Mr HARRISS - What is the lowest capacity cable that you have run? Most other jurisdictions stay up around the 110 kV and you come down really low, don't you?

Mr HUNNIBELL - We have assets down to 6.6 kV or 6 600 volts. Our voltages are 6.6, 11, 22, 33 and we have some 44 on the west coast, 110 and 220, so we have a diverse range of voltages that we manage. We are a bit unique compared to other transmission companies on the mainland where they are 110 and above - 220, 330 and 500. We actually go right down into what we call distribution voltages.

Mr HARRISS - Just as a matter of interest, where would you run a 6.6 kV?

Mr HUNNIBELL - A connection point to Norske Skog is an example. It depends on the customer connected as they have different requirements and different motors so we will match up with them with our input.

Ms FORREST - Is that an economies of scale thing? As Paul said, the other jurisdictions tend to not go down that low.

Mr LLEWELLYN - Yes, but this would be in regard to Norske Skog - and Michael will correct me if I am wrong. This would be taking the voltage from a higher 110 or whatever with its industrial transformer providing them with a -

Mr HUNNIBELL - Sorry, it is a 110 kV connection point, which is your 110 to 6.6 or 110 to 11.

Ms FORREST - How do the other jurisdictions handle that then?

Mr LLEWELLYN - Their distribution provide the transformer instead of Transend.

Ms FORREST - You do not do that because -

Mr HUNNIBELL - That is the way of the split at disaggregation in 1998.

Ms FORREST - A decision was made at the time, you are saying?

Mr HUNNIBELL - Yes, that is it and there has been no real reason to change up until this point.

CHAIR - On behalf of the committee, Minister, I would like to thank you and your team this afternoon. Thank you very much.

The committee adjourned at 4.37 p.m.