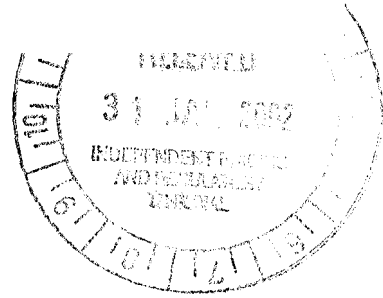


Allan Viney

29 January 2002

The Chairman
Independent Pricing and Regulatory Tribunal
PO Box Q 290
QVB Post Office
NSW 1230



Dear Sir;

Enclosed is my submission for the Review of the Costs, Benefits and Funding for Undergrounding Electricity Cables in NSW.

Because of the broadness of the reference from the Minister I sought some clarification and was advised that the scope of the Inquiry was limited to the retail distribution network and did not include the very high voltage lines of the Grid. My comments relate to the retail distribution network

Before the destruction of the local County Council Electricity authorities by the Wran Government in its desperate pursuit of their Sinking Funds to add to the Consolidated Revenue the Manly Warringah area was well served by the Mackellar County Council. That council had a policy of progressively undergrounding its lower voltage network, **As** a consequence those streets where the power lines are underground have well developed tree plantings that are untouched by the ruthless pruning of the trees under power lines now regularly undertaken with the excuse of reducing the bushfire hazard even though the nearest bushland may be very distant.

Back in the 1970s as a member of the NSW Legislative Assembly I and some colleagues were taken on a tour of inspection of the Sydney County Council's new offices. There we were proudly shown the new Storm Room with telephone hand sets for up to the Five hundred people who could be brought together to man the lines from callers reporting power failure.

In more recent times the Prospect county Council used to regularly boast of its new facility that pin pointed the areas of lightning strikes and so give a guidance as to areas likely to have a power failure. No doubt some of the staff would have had some sort of bet on the number of new strikes likely to happen within say the next hour

To-day's and to-morrow's consumers of electricity may well respond to a new form of gambling (extra revenue for a gambling obsessed Government) in which investors nominate the kilometres (millimetres, microns) of underground cabling that will be installed in the next week, month, year. with the revenue going to the Powerline Undergrounding Fund. The Opera House was finally painlessly paid off with the Opera House lottery.

I do not regard this letter or my accompanying submission as needing any restriction on its distribution to possibly interested parties.

Yours sincerely

Proposed Inquiry into the Undergrounding Electricity Cables in New South Wales

One of the most fundamental questions that needs to be addressed by the inquiry is the future ownership AND management of the land area required for urban utility services infrastructure – and that includes the air space. Concomitant with ownership is the question of rents to be charged to the existing and possible future service-supplying organisations, both public and private corporations.

These rents can be a part of the underwritten source of the funding required to establish a highly reliable, and environment desirable underground infrastructure designed for the future sharing by all of the appropriate utility service providers

When most of the services were provided by public authorities the question of paying a ground rent for a pipeline easement or rent of air space where the service was provided by way of aerial cabling seems not to have been given much consideration.. After all Local Governments were the creature of State Governments and Municipal and Shire Councils owned the Electricity County Councils and in some rural centres the gas mains as well

However when Optus Vision wanted to fast track the installation of its fibre optic cabling system it negotiated a right to hang its cable from the power distribution poles of the retail electricity suppliers. This provided a source of additional income to the electricity retailers, And that then opened the door for Local Government Councils to demand air space rent from Optus Vision. No doubt there will be some electricity retailers and Councils will want to be compensated for lost income if a decision is made to underground the existing overhead power cables.

As the privatising of services previously provided by publicly owned entities whether Federal, State or Local continues to gain momentum, the question of ground rent for all services infrastructure, even mail post boxes, needs to be considered.

If Australia Post were to be privatised one would assume the new owners would operate the existing mail receptacles. What will happen if a competitor to Australia Post comes into existence - will it have the right to install mail receptacles on the publicly owned Nature strip and pay no rent?

These matters are relevant to the current inquiry because it is asked to address the question of the feasibility of undergrounding electricity cables with other utility services including telecommunications. And to advise whether any economy of scale might be achieved.

One assumes the inquiry will take into account likely new telecommunication requirements and the facilities they may need, as well as allowing for possible increased electricity demand. Installing a cable undergrounding facility that did not have spare capacity for future needs should not happen but poor planning still is a major growth industry in many Government circles

There was a time when electricity retailers gave home owners a fiduciary bonus for having an “all electric home”. This disadvantaged those consumers who realised that there were some functions that would have been performed more efficiently if gas could have been economically used. The total community also suffered from the push to maximise electricity consumption through extra capital expenditure having to be found for more power stations that would have been unnecessary if more appropriate uses had been made of the energy sources already available. Not to mention an unnecessary generation of greenhouse gasses from additional power house emissions...

With electricity retailers now entering the gas business and gas companies now selling electricity, both made economically possible by virtue of each company having access, on a commercial basis, to the various competitive energy distribution networks and possible new ventures from gas and electricity companies venturing into telecommunications **the whole question of future ownership of the physical distribution network needs urgent examination.**

It may well be in the national interest for a greatly expanded natural gas distribution network to be linked to every urban dwelling so that all premises could have a natural gas compression system installed for domestic motor vehicle refuelling. (The Commonwealth Government has already encouraged the installation of a number of natural gas refuelling centres at key points on the national highway network. This program is aimed at encouraging interstate road hauliers to use Natural Gas as an alternative fuel to Diesel)

In the Australian Capital territory there is a unique umbrella public utility organisation which is a partnership between a section of the ACT Government (ACTEW) and AGL. It is responsible for the provision of water, sewerage, gas, and electricity services to the ACT. In all new regions the infrastructure is underground. No doubt the capital cost of its installation, maintenance, possible enlargement and ultimate replacement is built into its products pricings.

All of the existing urban distribution network facilities for the utility services have finite lives. Sometimes the life can be extended as illustrated by the gas company AGL) inserting a plastic lining into its aged galvanised steel pipe network. But sooner or later the existing infrastructure will need replacing. Whether Telstra will continue to replace copper wire with new copper wire or supplant it with fibre optic cabling will be for its management to decide but where the replacement cabling is to be located should be the decision of the appropriate Government.

If, on balance, it is shown that the community is best served by multi purpose underground ducting then that should then be beyond argument.

It is not appropriate for managers of publicly owned electricity distribution facilities to say that undergrounding of power cables cannot be afforded. Their management responsibilities do not to require them to conduct a totally comprehensive Community cost benefit analysis of Power Line Undergrounding.

They do not have the resources and are probably operating in a Treasury dominated climate that demands maximum “Dividends” from their enterprises to be paid to the Consolidated Revenue. And perhaps their remuneration is effected by the amount of profit(?) generated.

The future undergrounding of existing above ground power lines is clearly a policy decision that can only be made by an elected Government, particularly if research indicates that a multiple use facility is best for the ultimate public interest.

The management of existing electric power distribution networks do however have a direct responsibility for providing the most reliable power supply possible and also to minimise risks of potential class-action litigation and damages payouts because of interruption of supply.

Apart from a steady increase in home based businesses and some corporations now finding out the benefits of tele-working both of which are computer –availability-dependent, households with children using the Internet for study related purposes should not be penalised through a power supply system constantly exposed to interruption.

There also may come a time when the dependents of persons killed in accidents involving power poles may be successful in suing the owners of the offending pole(s) Some years ago I was advised by the NSW Traffic Accident Research Unit (TARU) that collisions with fixed objects (mainly power poles) was the biggest cause of fatalities in single vehicle accidents.

If it were financially viable for introducing a program of frangible poles replacing the hard wooden, steel or concrete poles the number of fatalities could be greatly reduced but that will still leave electricity supplies liable to disruption when power lines are brought down by storms or motor vehicle impact It will also mean that electricity retailers could in the future still be the subject of massive class action damages claims from customers seeking to recover financial losses caused by power failure.

If electric power mains are to be undergrounded the present overhead connection to customer premises will obviously have to be modified. This can be done by the power retailer providing cabling from his main up through the centre of a steel post located just on the boundary of the customer's property - the present overhead cabling from the Point of Attachment would be diverted to the new steel pole, The customer could be given the choice of having a totally undergrounded supply if he was prepared to pay the cost of the undergrounding from his property boundary to the existing Point of Attachment. Such costs could be recovered over a prolonged period by a levy on the electricity account.

Now that energy customers can from time to time exercise a choice as to who they want as their energy supplier it may be desirable that all of the existing retail distribution physical networks (gas pipe lines, electricity cabling and possibly the telecommunications cabling) be acquired by a newly established distribution networks infrastructure company.

This would avoid wasteful duplications such as has occurred when both Telstra and Optus have duplicated installation of fibre optic cabling, The Funding of such a company could be attractive to institutional investors. (eg, Macquarie Infrastructure Fund) This initiative would not lessen competition between suppliers. The single ownership of the means of physical distribution of all services should eliminate the current uncoordinated digging up of roads and footpaths.

The undergrounding of all electricity distribution mains could also trigger a total rethink of street lighting. The questions that need to be addressed include whether or

lights need to be on poles or could they be more effective if installed at ground level. For ground level installation the street light housings could be made from virtually indestructible advanced composite FRP having toughened glass or polycarbonate lenses. A change of colour could occur to indicate road intersections, and also indicate the location of pedestrian crossings. Any reduction of street lighting pollution of the sky would be good news to astronomers, amateur and professional.

ALLAN VINEY