This submission to IPART is made by me, William Michael Woods, on the 4th February, 2002.

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Submission to the IPART review on the costs and benefits of Undergrounding Electricity Cables.

Main Points:

- 1. The benefits of undergrounding electricity cables only, and leaving all other cables suspended, are so **diminished**, as to be not worth considering.
- 2. Any scheme for undergrounding overhead lines of all types must be associated with legislation prohibiting any future suspension of cables from any source. This may require a joint State & Commonwealth approach, for constitutional reasons.
- 3. The cost of any all-embracing proposal will be such that it can only be implemented over a substantial period of years. As a result, the technology used should be such as is likely to be viable over the life of the project.
- 4. In the current economic climate, the cost should be borne by the user. This means that electricity customers bear the cost of undergrounding electricity, phone customers the cost of phone lines, Pay TV customers the cost of Pay TV cables, etc. Customers should have the option of an upfront capital payment or regular payments over a period of years.
- 5. The economies of scale and minimal disruption resulting from the simultaneous undergrounding of all services is such that no other option should be considered.
- 6. If the cost of undergrounding is less then the increased value of the real estate, a considerable number of property owners, particularly in more affluent areas, will be in favour of the change.
- 7. Appropriate cost concessions could be given by government to pensioners and other low income groups in the same manner as at present. Part of these concessions could be recovered on the death of the pensioner.

8. Detailed points

- (a) In determining the cost of undergrounding, electricity authorities should be required to take account of savings they will enjoy from reduced maintenance costs.
- (b) All telecommunications services should be carried on one optic fibre link which would be owned by a government administered "cable" authority and available to all. The legal status of such a link should be the same as a public road used by a variety of private vehicles.

(c) Telecommunications entities with current hybrid coaxial/fibre networks (such as Pay TV) will be faced with updating the network to one of full fibre over the next few years. This cost must also be discounted when they calculate the undergrounding cost to their customers.

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(d) One problem involved in a transition to a fully digitised communications channel is the current cost of household decoders. The declared policy of the British Government on conversion of the UK TV service from analog to digital should be used as a basis for reducing the cost of these decoders earlier rather than later.

7. Implementation

- (a) The cost of undergrounding will require the work to be done over an extended period. It would therefore seem appropriate that areas which will receive the greatest benefit, and also have the greatest capacity to pay, should be done first. This would maximise the community benefit, and allow improvements in productivity to be passed on later to areas with a lesser capacity to pay.
- (b) Typical Sydney areas that should be considered first would be those such as Wahroonga and Beecroft, which combine a large population of trees with a reasonably affluent populace.
- (c) If an area is going to be undergrounded, the whole supply route ideally needs to be done for all supply voltages below the 66Kv level. There seems little point undergrounding the 415 volt lines if the high voltage feeder lines supplying the area remain above ground and subject to interruption by storm damage. However it is appreciated that for 33Kv lines this may be technically difficult.