

**Dr Sydney Baggs** CA, FRAIA, FRS (Arts Lond,) FRIBA, FCIMRF Life DepGov IBA (USA) *MAAAS(USA) PhD March BArch GradDipLandDes  
GradDipBldgBiol&Ecol(NZ)* ***Environmental Architecture Architectural & Biological Health Science Landscape Architecture***

1/02/02

Mr Michael Seery  
Program Manager Electricity  
Independent Pricing And Regulatory Tribunal

Re: IPART Review of the Costs, Benefits & Funding of Undergrounding Electrical Supply Cables

Dear Sir,

In response to your call for public submissions to the IPART review of the NSW Government's proposal to site electricity cables underground, I would like to make the following observations:

- 1) I am pleased to see that, at last, a government is willing to question the visual blight of above ground poles and wires on the streetscapes of our city and towns of NSW;
- 2) However all aerial cabling should be reviewed, including telephone and optical-fibre cable;
- 3) It is important to note that visual amenity and the logistics of relocation are not the only considerations to be made on this subject. Another is the results of EMR exposure upon the human body, particularly the deleterious effects that have been shown to result from EMF exposure (particularly in the ELF band) to biological cells;
- 4) From research I have found that soil cover and encasement in the case of underground cables has little influence on the field strength surrounding cables when compared to normal (above ground) spatial distribution. This means that cables beneath public footpaths and open spaces are physically closer to pedestrians and therefore expose the human body to EMR more than elevated cables. Already in Sydney there are numbers of people who carefully choose the location of their homes to avoid major transmission lines. At least aware home buyers can prudently avoid purchasing dwellings within obvious proximity to HT cables. But if the cables are concealed beneath the ground, people can be unaware that they are within metres of hidden sources of potential risks to health;
- 5) Consequently, all electrical cables should not only be sited underground to improve visual amenity and safety from fire and accident, but they should also be located in service corridors, away from public access and well signposted with warnings about overexposure being a health hazard.

I look forward to seeing that future planning and progress with the costs and benefits of undergrounding electricity cables in NSW, will take considerations such as these into any costing formulae being devised.

Yours faithfully,

Sydney A. Baggs

---