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Dear Sirs

IPART Review of the Costs, Benefits + Funding for Undergrounding Electricity Cables

Public Submissions

Thank you for the opportunity to **make a submission** about the NSW government's proposal **to** underground electricity cables.

What a fantastic **initiative that finally** addresses Robin Boyd's 1960s plea to remove the ugliness and blight **of** aerial cables. It is **certainly** great news that Sydney's **urban** and **rural** visual quality along utility corridors and streetscapes will **be significantly** improved **by** progressive undergrounding **of all** electricity cables. However such **a** quality attainment would **be** *sadly* marred if **aerial** telecommunication cables leg, the 'Optus' Cables) were not **also** undergrounded **at** the same time.

Principally, I **am** most concerned about the EMR fields associated **with** electricity cables (330+kv >> 22kv **>> 250v @ 50hz).** Undergrounding cables **will not** have any effect on shielding **EMR** effects upon occupational and residential landusers.

It is sensibly essential that the EMR effects are **not** increased **by** relocating closer **to peopled** landuses. In fact the opportunity **should be taken of** prudently relocating the **distance of** setback further away **than** presently exists.

Such relocation would see major powerlines **being** ideally relocated within infrastructure **and transport** corridors — rather than **being drawn** down residential and **high** occupancy streets or placed in **tunnels** beneath CBD + residential **areas.** Minor powerlines would **be best** positioned in **the** kerbside **of** streets, rather than the **'nature** strip' adjacent to occupied **property (also conflicting with amenity trees).**

Secondarily, I **am also** concerned about **the** increased potential **for** 'stray voltage', **or** 'rogue current', **to be** wasted and bleed into local materials and **buildings.** This phenomenon appears **to** be occurring at Hornsby **Shire,** where electrical **shock is** sometimes experienced **by** people in contact **with reinforced** concrete kerbs **and** other **local** structures.

Such phenomenon is **a major** problem in **some** regional **parts of USA.** It is **also** reported **in** Britain and **Europe.**

The benefits **of 'adding** value' to underground **cabling by** prudent **EMR** management should **be** accounted **for** in responding to the Terms of Reference, addressed **by Items** 5 + **6 + 7.**

There **is** absolutely **no wisdom** in ignoring EMR effects and **failing to** account **for** prudent **EMR** management **inputs to** cable relocation — whether underground or **aerial cabling.**

I trust that **such matters will be** properly **investigated** and **made** routine in the planning and design process.

Yours faithfully

Lex Bewley