### Strategy & Policy Unit

### SUBMISSION

# IPART INTERIM REPORT TO THE MINISTER FOR ENERGY: ELECTRICITY UNDERGROUNDING IN NSW

### INTRODUCTION

Bankstown City Council (BCC) welcomes the review of the costs, benefits and funding for undergrounding electricity cables in NSW undertaken by the Independent Pricing And Regulatory Tribunal (IPART) at the request of the Minister for Energy. BCC also appreciates the opportunity to make this submission on the matter.

BCC does recognise the benefits of the undergrounding to the wider community in terms of safety, reliability of supply, improved amenity and streetscape aesthetics and therefore supports the initiative for undergrounding in principle.

However, Bankstown Council has some concerns about certain issues that have significance in terms of quantifying the benefits, identifying the beneficiaries, implementation and funding the undergrounding project and ownership of the underground infrastructure. BCC also has some serious concerns about the approach taken by the IPART in making its recommendations regarding raising the fund.

Council's concerns are in the areas of:

- Benefits of undergrounding, both quantifiable and unquantifiable
- Impactor pays or beneficiary pays?
- Funding options, particularly local government rates as the fund raiser
- Asset ownership of underground infrastructure
- Implementation: pilot projects
- Choice for communities to opt out

#### GENERAL

The Tribunal in its interim report to the Minister has included most of the relevant issues but some of the issues have not been examined in details. Also, some of the issues have not been analysed in the right perspective. As for example, the issue of asset ownership and the feasibility of separating the underground infrastructure

DOCS#27884

provider from the customer service provider has not been explored in details. Creation of a separate entity for underground infrastructure has advantages over various utility providers (distribution network service providers—DNSPs) owning and using separate corridors. Similarly, though profit making entities are better placed to pass on the costs to consumers, the Tribunal has chosen local government as the fund raiser without establishing much the justification in favour of this.

# QUANTIFIABLE AND UNQUANTIFIABLE BENEFITS OF UNDERGROUNDING

Though the Tribunal's interim report has identified the major potential quantifiable benefits, it appears to have failed to quantify several potential benefits. These Statewide benefits, not quantified by the Tribunal, include potentially avoided outlays on State Emergency Services activities in the wake of fires caused by overhead electrical incidents, storm damage worsened by the collapse of overhead lines, certain avoidable environmental damages associated with overhead infrastructure and other similar benefits.

Even those benefits that the Tribunal attempted at quantifying (at present value over 40 years), appear to have been grossly understated in the report. For instance the report quotes:

- Reduction in motor vehicle accident costs (\$230-260 million)
- Improvements in reliability of electricity supply (\$55-115 million)
- Avoided costs in operation and maintenance (\$105 million)
- Reduction in revenue losses due to outages and transmission losses (\$0.5-\$0.7 million)

Which adds up to only \$400- \$480 million (or \$275 -\$335 per household) at present value over 40 years. These figures for a period of 40 years appear to be low particularly for the last three items above (viz. improvements in reliability, avoided operation and maintenance costs and losses due to outages). For example, Energy Australia revealed in 1998 that it spends about \$930,000 a year on tree trimming in the Sydney's Northern Beach district, 15 per cent of the overall trimming budget for 8 per cent of its customers (Manly Daily, 30 July 98). If this is correct then Energy Australia alone must be spending at least \$6.2 million per year for tree pruning. Also for example, there were 486 bushfires in urban Sydney alone in the three years (1994-97) caused by powerlines. Energy Australia has recently spent \$40 million in undergrounding the northern beaches area in Sydney to avoid outages like those experienced in the recent past.

The quantifiable benefits should include reduced tree pruning costs, reduced costs associated with accidents involving machineries striking wires, reduced costs of shielding overhead cables at work sites, cost avoided by freeing up the movement of oversize vehicles with load height exceeding aerial cable clear height, reduced street lighting cost due to redesigned efficient network (though even with best pole spacing in the new network a minimum number of lighting poles will still be retained), reduced greenhouse gas emissions costs, reduced transmission losses, reduced losses

suffered by electricity consumers due to outages and reduced loss due to bushfires caused by powerlines.

Also, the report has failed to highlight the facts that:

- A substantial part of the main quantifiable benefits are likely to accrue principally to electricity distributors, telecommunications carriers and insurance industry and not to the consumers.
- the main reason that the substantial percentage of undergrounding in urban areas (25% of LV and 63% of HV for Energy Australia and 39% of LV and 24% of HV for Integral Energy) has already taken place is that there has been a realisation by the DNSPs that considering the rising costs of replacement and maintenance of the various components of the network, particularly for damage due to storm, fire and accidents, it is "the right way of dealing with the electricity network" in their own interest. They have however been lucky to pass on most of the cost to consumers and become owners of assets.

The Tribunal's observation, in its interim report (Exec. Summary, page i), that "widespread undergrounding is only justified if the value of hard to quantify benefits such as improved amenity is very high" downplays the significant hazards and negative aspects of overhead infrastructure and understates the benefits of undergrounding that will accrue to electricity providers. This approach is also incompatible with its observation in the same page of the report that "In NSW, undergrounding efforts to date have been the result of commercial decisions by electricity providers." (p-i). It is hard to believe that in commercial decisions benefits did not outweigh costs.

According to the Tribunal, benefits that could be quantified constitute only 15-20 per cent of the total costs of undergrounding. The Tribunal's report did not attempt to directly quantify the improved amenity values resulting from undergrounding. Because it thinks the local community is the beneficiary of the improved amenity due to undergrounding, it has recommended that 80 per cent of the costs be recovered from the local community. By recommending this, the Tribunal has actually ended up overly quantifying this without any basis and/or an assessment of how much the communities may be "willing to pay" for this improved amenity. This approach also negates all concepts of public good, or community service obligations of government authorities. Also, for instance, the value placed by individual members of the community (or a particular community) on an overhead cable-free improved amenity will be affected by the extent of personal contributions they might be asked to make to the capital costs. The report briefly mentioned but did not give due importance to several other benefits e.g. improved public and wildlife safety, potentials for improved wildlife habitat, reduced electrocutions, reduced EMF health risks, improved street lighting network and other new opportunities. With some further work, the Tribunal could attempt at quantifying at least some of these. It could at least mention these as significant avoided cost for the State.

#### IMPACTOR PAYS OR BENEFICIARY PAYS?

The Tribunal in its report acknowledged that "in comparable situations, where expenditure is required to avoid external costs related to the delivery of a service, an 'impactor pays' (or 'polluter pays') approach is often used to fund that expenditure." The tribunal did not recommend 'impactor pays' approach as appropriate and cited several arguable reasons for this. It apparently chose to recommend a 'consumer pays' approach in the garb of a 'beneficiary pays' approach. This is evident from a lack of highlighting in the report that the DNSPs are both impactors and beneficiaries and from recommending that they pay for a negligible 5 per cent of the undergrounding costs. This is even less than the benefits the Tribunal quantified as accruable to them. The Tribunal argued that "the external costs of the overhead network are to a large degree the legacy of historical rather than current decisions by electricity providers' and that 'there is no proposal to compensate those who are disadvantaged by this legacy'. The Tribunal here failed to give due consideration to the fact that similar arguments could be used in favour of the community. Moreover, as it also mentioned, when overhead infrastructure is ready for replacement and DNSPs elect to continue to use the overhead network ignoring the underground option, they are electing to impose continued externalities. In the context of these arguments and counter arguments, the Tribunal's "community pays' approach, though labelled as 'beneficiary pays', may not appear as a sound one.

Bankstown Council would like to emphasise the fact that mere legacy of inheriting the overhead network does not totally absolve the DNSPs as impactors.

The Council therefore strongly argues that a balanced combination of 'impactors and beneficiaries pay' approach is more appropriate and as the DNSPs are both impactors and beneficiaries they should burden their reasonable share of the undergrounding costs instead of a token 5% allocated to them by the Tribunal.

## FUNDING OPTIONS, PARTICULARLY LOCAL GOVERNMENT RATES OR LEVIES

In its report, the Tribunal has stated that "the estimated value of the benefits quantified in this report suggest that just some 80 per cent of costs would be best recovered through local government rates or levies.." This observation cannot be supported. The understated benefits, as quantified in the report, constitutes only 15-20 per cent of the undergrounding costs. The Tribunal chose not to consider several cost avoidances as mentioned by us earlier and also did not attempt at quantifying or assessing how much the community is 'willing to pay' for improved amenity values. It is not understood why, only because it could not (or did not) quantify, the Tribunal is of the opinion that "80 per cent of the costs would be best recovered through local government rates or levies..." from the community. Also, not understood is the rationale behind its recommendation that "about 10 per cent would best be funded by the State, and about 5 per cent would best be funded by the DNSPs."

Bankstown Council strongly disagrees with the funding recommendations by the Tribunal and submits that:

 Any widespread undergrounding to become successful clearly will require effective commitment and financial support from the State Government. At

least, a commitment from State Government similar to that displayed by Western Australia and South Australia is essential.

- The Council strongly urges that both the State Government and DNSPs shoulder their legitimate shares of the burden of the undergrounding costs; the State considering its public good obligations and avoided costs in several areas and the DNSPs considering their role both as impactors and beneficiaries and their vulnerability to future litigations.
- Though the Tribunal has recommended a mixed funding approach, the sharing proposed is not an equitable one.
- As opposed to the token participation by the State Government and utilities proposed by the Tribunal, a more balanced and equitable combination of funding approach will require substantial funding to come from the State Government, electricity and communication utilities and may be even from the Federal Government. This is because achievement of any widespread undergrounding will require a significant commitment in policy as well as in financial terms by all spheres of government and all major beneficiaries.
- As Local Government, Bankstown Council would like to express its concern that the Federal Government, after giving Telstra and Optus rights to override community concerns and roll out duplicated aerial pay TV cabling adding further to the already ugly blight caused by poles and wires, is not even identified in the report as a possible financial contributor to any undergrounding program. In the same way, the report exempted the communication utilities in the name of keeping their operation 'viable'.
- Bankstown Council strongly feels that the community should not make any contributions towards the shareholders of Telstra and Optus benefiting from the free use of an underground infrastructure. Therefore, the Council rejects the Tribunal's suggestion that "the size of the levy or rate adjustment could be set so that it also covers the cost of burying communication cables" on the ground that it is not equitable.
- In summary, Bankstown Council does not find acceptable the recommendations of the Tribunal that 80 per cent of the cost be recovered from the community as local government rates or levies. More specifically speaking:
  - o It strongly advocates for a more equitable sharing mix with the electrical and communication utilities and the State Government participating more effectively similar to the South Australian funding model, instead of a token participation recommended for them by the Tribunal. It also feels that the Federal Government should be canvassed to play their role in funding.
  - o Regarding local government rates or levies, as recommended by the Tribunal, Bankstown Council is of the view that Local Government should not be the revenue collector for other areas of Government. The

Council is also strongly opposed to any program that would impose any costs on Local Government or impose any responsibilities or obligations on Local Government for the management of any undergrounding program.

- Bankstown Council also is apprehensive that the community may be opposed to high upfront payments, and such payments are likely to be inequitable.
- o Bankstown Council suggests that it may be more feasible to collect community's share of the funding via utility charges and the community may be more cooperative to this method of payment.
- o Bankstown Council also would like to lobby that such a levy be amortised over a period of time rather than being imposed as a single lump sum so as to avoid hardship.
- O There are other issues as well that will need to be resolved e.g. when it comes to paying who are the "community" ie. owner of a property or a user of the service at a property. Also, does the State intend to pay from the exchequer the community levy for public housing? There is a lot in Bankstown. A similar arrangement for concessions to pensioners which previously applied to environmental levy on water accounts may be required for any proposed levy on electricity accounts.

### ASSET OWNERSHIP OF UNDERGROUND INFRASTRUCTURE

Bankstown Council feels that opportunity exists for the NSW Government to consider the separation of the underground infrastructure provider from customer service providers. "Streets in major centres contain numerous pipes, ducts, cables and conduits for various utility providers, all in separate trenches, crowding sub-surface area. A more efficient and functional system for utility reticulation is desirable." (LGSA). One way of achieving this could be the creation of a new underground infrastructure entity to variously build, own, operate and maintain a multiple use, optimally designed layout of underground networks. Utility providers would become purchasers of its capacity. As utility providers upgrade and replace existing networks, they would relocate into the common duct provided and maintained more economically and efficiently by this new entity. This entity might be able to seek commercial funding for the assets to be created.

• The Tribunal briefly mentioned this potential in its report but did not examine this in detail. Bankstown Council suggests that due consideration be given to this at the appropriate stage.

### **IMPLEMENTATION: PILOT PROJECTS**

As has been acknowledged in the Tribunal's report, there are lot of uncertainties involved in different areas of cost, funding mechanism and successful use of optimum network design technology and their influence on costs in a widespread undergrounding program.

• Bankstown Council therefore suggests that pilots be undertaken before large scale undergrounding is implemented.

### CHOICE FOR COMMUNITIES TO OPT OUT

In its report the Tribunal recommended, "Communities that place a relatively low value on the local benefits of undergrounding should be given the choice of opting out." Any wide spread undergrounding program to be successful will need to be an inclusive program, not exclusive. Offering choice to opt out could reduce the economies of scale for major undergrounding projects. Also, it is important that the whole community is able to enjoy the benefits of undergrounding not just local communities who opt for it. Car accidents occur randomly and can involve people outside their own locality. Business and industry serve communities beyond a local area, reliability of electric supply can benefit all not just local customers and overhead-cable-free improved amenity can benefit visitors from other communities.

- Bankstown Council therefore is of the opinion that widespread undergrounding
  has merits in terms of broader public good should be implemented, in an inclusive
  way wherever possible and needed on priority basis, on an equitable cost-sharing
  basis.
- Only fringe areas lacking density or economies of scale may be left out.

### **CONCLUSION**

By way of conclusion, Bankstown City Council:

- Supports the undergrounding in principle but it does have many concerns with the
  various recommendations of the Tribunal which must first be resolved before the
  appropriate authorities decide to move with any widespread undergrounding.
  These concerns are considered particularly valid, as some of the recommendations
  by the Tribunal have substantial implications for local government and the
  community.
- As the tier of government closest to the community, looks forward to further consultation and opportunities to comment on these issues.

### RECOMMENDATIONS

Bankstown City Council makes the following recommendations to facilitate the development of an equitable solution to the undergrounding proposal:

- To generate sufficient community support for the undergrounding to proceed, governments and the utilities should make substantial funding commitments and devise a more equitable funding solution than what has been recommended by the Tribunal in its interim report.
- Local Government and the community should be consulted on an ongoing basis throughout the process and there should be local government representation in all task forces and steering committees.
- Issues and concerns detailed in the foregoing submission be given due consideration in the Tribunal's ongoing investigations.