INDEPENDENT PRICING AND REGULATORY TRIBUNAL OF NSW

PUBLIC FORUM INTO REVIEW OF THE COSTS, BENEFITS AND FUNDING FOR UNDERGROUNDING ELECTRICITY CABLES

- - -

Held at the Wesley Centre 220 Pitt Street, Sydney NSW 2000

On Friday, 19 April 2002, at 9.40am

- - -

Computerreporters Pty Ltd Level 10 233 Macquarie Street Sydney NSW 2000

Tel: (02) 9221-6660

. 19/4/02 1

- 1 MR COX: Welcome to our public forum on undergrounding.
- 2 Today is Tuesday the 19th of April and we are having
- 3 this public consultation session to assist us in
- 4 finalising the tribunal's work on undergrounding. 5
- $6\;$  As you know, we released an interim report last
- 7 week. The purpose of this session is to get public
- 8 reaction and comments on that report which we will
- ${\bf 9}\;$  then finalise and present to the Minister for
- 10 Energy. I should point out that the tribunal is
- $11\,$  just working on some particular aspects of
- 12 undergrounding. We were asked to look at the costs
- 13 and some funding options. Obviously decisions about
- $14\;$  whether undergrounding will proceed are ones for the
- 15 Government, not for us.
- 16
- 17 I would like to start by welcoming you all to
- 18 this meeting today. Thank you for giving up your
- 19 time and helping the tribunal in this very
- 19 time and helping the trib

20 interesting inquiry.

- 21
- 22 The purpose of the forum is for us to provide
- 23 you with a brief overview of the tribunal's interim
- 24 report and then we will provide an opportunity for
- 25 you to give your reactions back to us. To help us
- 26 to do that we have a panel of experts sitting on my
- 27 left, and we are interested in having questions and
- 28 comments from the floor.
- 29
- 30 The way we proceed is first of all Fiona Towers
- 31 from the tribunal will run through the review
- $32\;$  process briefly. Then we will have a presentation
- $33\;$  from Jeffrey Wilson from Meritec, who did work for
- $34\;$  us on the costs, indicating what work he did and
- 35 what the results were. Then we will have a
- $36\,$  presentation from Ross Chapman from the Centre for
- 37 International Economics on benefits and funding
- 38 options. We will run through that without 39 interruption.
- 39 i 40

- 41 Then we will move over to the panel on my left
- 42 and the way we might do that is each panel member
- 43 will speak in turn for no more than five minutes and 44 then we will ask Jeffrey and Ross to respond to any
- 45 particular points that might arise. We will then
- 46 have a very short break followed up by general
- 47 discussion. We have allowed an opportunity for
- 48 anyone to speak this morning and we will finish by
- $49\,$  no later than about 1.30. That is the plan for this
- 50 morning.
- 51
- 52 Just a few housekeeping matters: As I said,
- 53 panel members will speak for about five minutes
- 54 uninterrupted. We will then follow up with general
- 55 discussion, comments and questions. I should also
- $56\;$  point out that we have some transcribers here who
- $57\;$  are taking a record of today's proceedings for the
- 58 benefit of the tribunal and the secretariat.
- .19/4/02 2

Transcript produced by ComputerReporters

2 With that, I will pass over to Fiona who will3 speak about the review.

1

4 MS TOWERS: As Jim pointed out, in late December the 5 6 Minister for Energy asked the tribunal to undertake 7 a review to identify the costs, benefits and funding options of undergrounding cables in New South Wales. 8 9 In undertaking that review the tribunal has defined 10 the project area to be all urban centres with a population greater than 30,000 people. This aligns 11 12 with the definition of the project area in the 1998 13 Commonwealth study that was done. 14 15 It also includes the undergrounding of 16 electricity wires with a voltage of 22kV and below 17 and the proposed undergrounding of the project area 18 is to be taken over a 40-year period. 19 20 In terms of estimating the costs, the tribunal 21 engaged an expert engineering consulting firm, 22 Meritec, to provide a high level review of the 23 likely level of costs in undergrounding. I must 24 emphasise that it was a high level review. 25 26 The costs presented in the tribunal's report 27 are broad estimates of the likely order of magnitude of costs and, as the tribunal's report points out, 28 29 further work will be required to provide firmer estimates of these cots. Jeffrey Wilson will 30 31 provide an overview of the way he approached the 32 work and his key conclusions. 33 34 The tribunal was also asked to look at the 35 benefits of undergrounding and funding options. The tribunal asked the Centre for International 36 Economics to estimate those benefits that could be 37 quantified and Ross Chapman is here from the centre 38 39 and will talk about those matters. 40 41 In terms of the way forward, the tribunal 42 published its interim report approximately two weeks 43 ago, it is holding a public forum today and public 44 submissions are due on Friday 26 April by close of 45 business - they should be sent to the tribunal - and 46 the tribunal is required to report to the Minister 47 by 10 May. Thank you. 48 49 MR WILSON: You are setting a brisk pace. I want to 50 restrict myself to several important points. This 51 subject of undergrounding is obviously a very 52 important matter and not only in Sydney. There are 53 many other cities in the world presently considering 54 this issue, particularly with the extension of 55 telecommunications networks, although the whole 56 question of undergrounding networks is one of long 57 standing. 58

.19/4/02 3

1 Our task in this work was to assist the

2 tribunal on the estimation of costs for the

- 3 undergrounding of electricity networks and the
- 4 likely programming of the expenditure. We also had
- 5 some other tasks to advise the tribunal on related
- 6 matters but that was the essence of our work. 7

8 We have produced a report on the matters within 9 our terms of reference and I think it's available on 10 IPART's website. By and large it is a technical 11 engineering report and I don't think it is

12 appropriate to go into too much of the engineering 13 detail today for what is essentially a public forum. 14

15 What I would like to talk about today are two

16 or three main points. Firstly, the fact that the

17 network concept, the replacement network concept,

18 has a significant impact on the cost estimates. The

19 second point I would like to discuss is the question

20 of cost drivers in terms of the main influences on

21 the costs of undergrounding programs. I would like

22 to briefly discuss the matters related to the choice

23 of unit costs that we used in our estimates and I

- 24 will briefly summarise the estimates for you and I 25 will just touch on avoided costs.
- 26

27 Over the last three years or so we have been

- 28 working on several major undergrounding studies for
- 29 major cities in other countries where the intention

30 is to convert existing overhead networks to

- 31 underground networks. In some instances the
- 32 networks have been run down and due for replacement;
- 33 in other instances with expansion the policy

34 decision is to shift towards undergrounding and to

35 develop plans for undergrounding for these cities. 36

37 The result of this work has been that we have

- 38 developed techniques and models for optimising a new
- 39 underground network, and I emphasise the word "new"
- 40 because in this state undergrounding has already
- 41 progressed significantly in Sydney, for example,
- 42 where I think 60 per cent of the existing network is
- 43 already underground.
- 44

45 What I will try to explain to you today is

46 based on that broad experience, although I am not

47 planning to go into the methodology in detail,

48 firstly, to deal with the question of replacement

49 network. If the existing network is to be replaced

50 with obviously a new network underground, the

51 question is what sort of network should be built. 52 The choice of network underpins the estimates of

53 capital expenditure.

- 54
- 55 An obvious possibility is to replace the
- 56 existing network, shall we say, like for like. By
- 57 that I mean that overhead lines would eventually be
- 58 taken down and laid in underground cables on much .19/4/02 4

Transcript produced by ComputerReporters

1 the same routes and with the same type of network 2 configuration. Obviously some modifications would 3 be made to the network but in principle the broad 4 concept of the network would remain unchanged. 5

6 That type of an approach, which is followed in 7 some cases, is followed for example where decisions 8 are taken say to put underground the electricity 9 lines on main roads. For example, in Auckland at 10 the time of the Commonwealth Games, Vector, the 11 power company, embarked on a major program to 12 underground lines on main thoroughfares. It had a 13 very positive effect on the appearance of the city 14 but in terms of a widespread program for 15 undergrounding the entire network it also introduced 16 some problems.

17

18 One of the difficulties with replacing like for 19 like is that the approach tends to be incremental 20 and the problem with incremental approaches is that 21 over time they tend to use too much equipment and 22 they lock in the present network structure. The 23 present networks structure might not in fact be the 24 best structure for the future and to solve that 25 problem it is wide area planning that is required in 26 order to lay out a replacement network that is best 27 suited for the future electricity needs of the 28 state.

29

35

30 The 1998 Commonwealth study recognised this and

- 31 acknowledged that advantages could be achieved
- 32 through wide area planning although it didn't
- 33 actually carry those advantages through into its
- 34 cost estimates.
- 36 An alternative to replacing like for like would
- be to plan the network optimally and embark on the 37
- construction of perhaps a different type of network 38
- 39 which is best suited to the future electricity
- 40 distribution needs. In fact, DNSPs will adopt
- optimal planning anyway. They do it all the time, 41
- 42 but the point to note on this occasion is that it is
- 43 the large scale of the proposed undergrounding
- program that makes it different. If a program is 44
- 45 undertaken of the type that has been spoken of then
- 46 it presents a once in a lifetime opportunity to get
- 47 it right for the future. 48

49 To the extent of our work we have outlined an 50

- optimal network. We have done so only for the
- 51 purpose of cost, only for the purpose of arriving at
- 52 broad estimates for the Government's present
- purposes. I would like to emphasise that detailed 53
- 54 design, detailed investigation and the preparation
- 55 of preliminary designs still needs to be done before
- 56 any such networks could be confirmed as suitable.
- 57 By detailed investigation I mean essentially social 58 economic investigation and the projection of future .19/4/02 5

1 loads. And by preliminary designs I mean a thorough

- 2 engineering study to develop the best network
- 3 solutions for the urban areas in the state.
- 4

5 There could be several man years of engineering 6 work required to develop those concepts and test 7 them. We have been able to do no more than using 8 our existing experience and our model and adjusting 9 it and calibrating it for New South Wales to come up 10 only with the broadest of concepts and the point 11 that we really want to make is that like with like 12 is one approach but it is not likely to lead to the 13 best outcome in terms of the replacement network 14 either technically or economically. 15 16 A different and optimally planned approached is 17 probably a better solution but the work still has to 18 be done to develop that solution. Note that I said 19 optimally planned, not necessarily optimally 20 implemented, because we are working with an existing 21 network that will have to be taken into account and 22 the point that I will come to later in this 23 presentation is the high cost that arises if 24 serviceable assets are thrown away prematurely 25 purely out of a desire to have a different network. 26 I will return to that point. 27 28 In terms of looking at costs, firstly, it is 29 low voltage costs that drive the costs of 30 undergrounding most, particularly customer 31 connections. Actually, the treatment of customer 32 connections is one of the biggest bugbears in all 33 undergrounding programs because not all customers 34 favour an undergrounding approach and not all 35 customers wish to pay. 36 37 In terms of costing an underground program, the 38 focus is initially on the location of low voltage 39 customers. In fact, a question arises as to how 40 extensive the program might be because this also 41 drives costs. Clearly undergrounding is not going 42 to extend to rural areas but where exactly will an

- 43 appropriate boundary be around the urban areas which
- 44 are undergrounded. The difficulty is that no urban
- 45 areas are characterised by clearly delineated
- 46 boundaries. In fact, they are characterised by a
- 47 progressive reduction in low density and customer
- 48 density which reduces the economies of
- 49 undergrounding progressively as one moves away from 50 the centre.
- 51
- 52 This is another area of uncertainty in the
- 53 estimates which have been presented to you today and
- 54 that is that without detailed work in this area we
- 55 have all only been able to make broad assessments of
- 56 the areas which would be covered by a feasible
- 57 undergrounding program. Having said that, the
- 58 estimates that have been presented in the reports .19/4/02 6
  - Transcript produced by ComputerReporters

1 cover virtually all of the population in the 2 designated towns Fiona mentioned and the assumptions 3 that had been made in areas which the Bureau of 4 Statistics classifies as urban. Anyway, I am just 5 pointing out to you another area where detailed work 6 is required to define this undergrounding program 7 and finalise its costs. 9 You need not necessarily be too worried about 10 that at this stage because it is probably costs per kilometre that are of more interest at this point. 12 As far as unit costs are concerned, several sources 13 are available. A standard set of unit costs is 14 available in the state's valuation guidelines. Each 15 of the DNSPs have its own costs developed for the 16 undergrounding work it has carried out. There are 17 other sources reflecting prevailing international prices for the construction of these types of assets 19 but a point which I would like to make and which I mentioned before is that a widespread program of the 20 21 type envisage may generate its own set of costs 22 depending on how it is handled. Also, of course, it 23 will be important to make certain that account is 24 taken of the size of the program and that economies 25 are reflected. The principal uncertainty in the 26 estimates arises from the unit costs rather than 27 from the quantities. 29 The indicative estimates for this capital expenditure program are between \$4m to \$8m per

- square kilometre covered. A weighted average 31 expenditure per low voltage customer - for 32
- electricity alone, I add is of the order of around 33
- 34 \$2,170. These are in present day prices. In the
- 35 IPART report present calculations have been
- 36 presented for the program as a whole.
- 37

28

30

8

11

18

- 38 The main points I would like to make in respect
- 39 of costs are these: my first point, essentially -
- 40 to digress for a moment - was to highlight the
- 41 importance of the selection of the replacement
- 42 network in terms of determining costs. The second
- point I would like to make is this: everyone likes 43
- a simplistic view on costs but I would caution you 44
- 45 against attaching too much importance to any of
- 46 these numbers at this time, since the detailed
- 47 engineering work for the development of an
- 48 undergrounding program is still to be undertaken. 49
- 50 The expenditures for this program are vast and
- 51 I think we all owe the State a duty of care to get
- 52 it right. Getting it right in this context requires
- 53 detailed work to be undertaken by the DNSPs and for
- 54 a detailed program to be developed. In that
- 55 context, do bear in mind that the detailed
- 56 engineering work is yet to be done.
- 57
- 58 My third point, Mr Chairman, relates to the .19/4/02 7

- 1 program of expenditure. I would like to underscore
- 2 here the high additional costs that arise as the
- $\ensuremath{\mathbf{3}}$  program is accelerated. The most efficient program
- 4 would be to retain existing assets and service until
- $5\;$  the end of their remaining serviceable life and then
- 6 progressively replace them with an underground
- 7 network. 8
- 9 If that approach is followed the program will
- 10 constitute about a 40-year roll out, consistent, I
- 11 might add, with the assumption that assets reaching
- 12 the end of their life generally are the assets that
- 13 are in the worst condition.
- 14

15 One might say that this approach is too

- 16 simplistic because the assets aren't dispersed
- 17 through the urban areas in convenient pockets of old
- 18 and new assets; in fact, they're mixed up together.
- 19 That is one reason why a fully optimal approach will
- 20 not be able to be achieved in practice.
- 21
- 22 The point I am making is that the most
- 23 efficient program is to retain serviceable assets in
- 24 operation until their life expires and then convert
- 25 the network underground progressively at that point.
- 26 To advance the program will require the writing off
- 27 of the residual value of serviceable assets, but
- 28 from an economic standpoint, in the State as a
- 29 whole, it constitutes an unnecessary advancement of30 expenditures, with a consequential economic cost.
- 31
- 32 If the program were to be shortened to half the
- $33\;$  time, the present value of the program would be
- 34 increased by 62 per cent. That is just to give you
- 35 a feeling for the additional economic cost involved,36 from the viewpoint of the State, if the program is
- 37 accelerated.

38

- 39 The final point, Mr Chairman, that I would like
- 40 to make is this: do bear in mind that the existing
- 41 network is aging and will need to be replaced at
- 42 some point anyway. An important avoided cost to
- 43 remember with undergrounding is the cost of not
- 44 replacing the existing aging network at the end of
- 45 its life with another overhead network.
- 46

47 That avoided cost might constitute around a

- $48 \ \ half of the \ cost \ of \ the \ undergrounding \ program \ but$
- 49 detailed work would be needed to confirm that
- 50 estimate. When Mr Chapman goes on to discuss the 51 benefits, he might refer to this point.
- 52
- 53 Mr Chairman, I have finished a little early but
- 54 they are the points I wanted to make firstly, the
- 55 necessity of considering the network concept in
- 56 order to get it right for the future; secondly, the
- 57 necessity of confirming the estimates with detailed
- 58 investigation and design work, which is not yet
- .19/4/02 8

Transcript produced by ComputerReporters

- done; and thirdly, to highlight the magnitude of the
  expenditures and to point out to you that the most
- 3 efficient program economically is to continue to
- 4 retain full use of the serviceable assets until
- 5 their life expires and as a result, make a
- 6 progressive conversion to undergrounding. I think
- 7 that covers the main points.
- 8
  - THE CHAIRMAN: Thank you very much for that very clear
- $10\;$  presentation. We now move on to Ross Chapman from
- 11 the Centre for International Economics, who will
- 12 speak about benefits.
- 13

9

- 14 MR CHAPMAN: Ladies and gentlemen, the Centre for
- 15 International Economics has involved itself in work
- 16 of public interest for some years now and
- 17 particularly in work involving benefit cost
- 18 analysis. It is always gratifying to actually see
- 19 that you're working on a project where there is
- 20 public interest and I think that is testified to by
- 21 the attendance here today.
- 22
- 23 Let me also say that in working on both the
- 24 benefit and the funding side of this question we
- 25 enjoyed drawing information and ideas from the
- 26 public submissions that were made to this inquiry
- 27 and so when it came to the task of trying to
- 28 identify what benefits should be considered and
- 29 indeed the more complex task of how to quantify
- 30 them, we were helped by the obvious effort that had
- 31 been put into this by people with an interest in the
- 32 area; so we're grateful for that.
- 33
- 34 In moving along from Jeffrey's concern with
- 35 giving high level broad estimates to costs, what are
- 36 the next steps in a project of this kind? One is
- 37 to question what indeed are the benefits that could
- 38 be used to justify a project of this type and how
- 39 big are they, a very vexed question if one tries to
- 40 put dollar values on these things.
- 41

51

.19/4/02 9

42 You have already heard Jeffrey speak of the

46 as difficult to put dollar values that are

50 and treat those numbers for what they are.

52 How are the benefits to be distributed if

53 government decisions are to be taken wisely in

54 projects as important as this? Government needs to

55 give due consideration to who will enjoy the gains

56 from this and it needs to do that in order to safely

57 underpin a funding mechanism for allowing this

58 project to go ahead, if it were deemed to be a net

Transcript produced by ComputerReporters

- 43 need to be extremely cautious and circumspect over
- 44 cost numbers. I could add that when it comes to
- 45 benefits you can say that in spades. It is at least

47 meaningful on the benefits in this kind of exercise,

49 in the Tribunal report with a good deal of caution

48 so I encourage you to read anything that is produced

1 benefit to the citizens of the State. 2 3 One can't make sound decisions about putting in 4 place projects of this kind without grasping the 5 nettle of who should pay for them and how. Really, 6 our task covered each of those issues. Some of you 7 will have already looked at the Tribunal's report 8 and a way to summarise what we tried to do there is 9 to attack this question of the benefits of 10 undergrounding by being upfront about what we 11 considered to be broadly, if very roughly, 12 quantifiable and what benefits may well be there but 13 would be intangible and it would be unsafe to try 14 and put even a rough dollar number against. 15 16 I think it is useful to try and divide the 17 sorts of benefits that flow from undergrounding into 18 those two broad categories and we've tried to do 19 that in this box diagram. The "too hard" part on 20 the left-hand side of the picture, the 21 unquantifiable benefits, shouldn't be dismissed as 22 unimportant. 23 24 All we are saying is that when we looked at the 25 evidence and we looked at efforts elsewhere to delve 26 into these questions, we couldn't find reliable 27 methods or sufficient evidence to go forward with 28 confidence and say, "Yes, there are things here that 29 we can try to represent in dollar terms." 30 31 You will see some of the categories there that 32 may be important but we can't say how important in a 33 quantitative sense. There is the obvious improved 34 public amenity area where we've discussed issues of 35 views, improved streetscapes, all of the usual 36 things that people have drawn attention to in 37 submissions to this inquiry. 38 39 I must say that we tried quite hard to 40 investigate the possibility of putting dollar 41 numbers around that and concluded that that would be 42 a somewhat dangerous thing to do and could be 43 misleading. 44 45 Improved public and wildlife safety is another 46 thing that people had quite a bit to say about in 47 submissions. In fact, the public safety issues 48 often have been misconstrued in this area. We would 49 draw your attention to the difference between public 50 safety issues surrounding electrocution-type 51 problems and over here amongst the quantified 52 benefits, where we have had a go at putting some 53 dollar numbers up, the reduced cost of motor 54 vehicle-pole collisions. 55 56 I think it is important to keep separate in 57 one's mind this difference between public safety

58 issues surrounding electrocution and issues .19/4/02 10

Transcript produced by ComputerReporters

1 surrounding motor vehicle accidents, where you can

- 2 have a stab at putting some dollar numbers on
- 3 things.

5 As we move through this list of unquantifiable

6 benefits, there are opportunities to increase

7 network efficiency. That proves to be at least at

 ${\bf 8}\,$  this stage of the analysis a too hard question when

9 it comes to quantification.

Amongst quantified benefits, one that we've

12 reported to the Tribunal is that matter of reduced

13 cost of motor vehicle pole collisions and that is

14 one of the more important in a numerical sense when

15 it comes to quantified benefits.

16

17 At a lower order of importance in a dollar

18 sense is the improved reliability of energy supply.

19 I hasten to add this is again quite a difficult

20 number to construct, given the kind of information

21 that's available when comparing an existing system

22 with a system that is replaced with undergrounding,

23 because in all of this what we're asked to do is

24 quantify the incremental benefits of moving away

25 from a system that we've got now and replacing it

26 sequentially with an underground system.

27

28 The only benefits that should be captured here

29 are the difference in benefits that one enjoys now

30 and the benefits that could flow from an underground

31 system. Our whole approach is to look at those

32 incremental benefits.33

34 In asking what are the benefits of improved

35 reliability of energy supply you have the difficult

36 issue of saying, "Well, how reliable is the current

37 system? How much more reliable is an underground

38 system and what does that mean in savings to

39 customers and in terms of revenue saved to

40 distributors?" That is not an easy question to

41 answer. We provide some indicative numbers on that.42

43 Then there is the avoided maintenance costs

44 that will be enjoyed by distributors and indeed to

45 some extent by telecommunications operators. These

46 are issues like avoided tree pruning costs and any

47 costs that are greater in maintaining an overhead

48 system than in maintaining its underground

49 equivalent.

50

51 Again, it is this idea of incremental benefits.

52 In this case the benefits are in the form of an

53 avoided cost and one might just as usefully take

54 these avoided maintenance costs ideas and lump them

55 into Jeffrey's domain and say, "All right, we've

56 calculated what it might cost to roll out an

57 underground system. Now let's see what we have to

58 subtract from that by way of avoided costs to .19/4/02 11

1 distributors". And then ask the question, "And what

- 2 are the remaining incremental benefits that might
- 3 offset those costs?" That is a good way of

4 proceeding.

- 5
- 6 Just to give you a feel for what is relatively

7 important and what's not amongst these incremental 8 benefits, we've calculated some rough proportions 9 here of what contributes to the benefits that we've

10 been able to quantify. Leading those you will see

- 11 is the dollar contribution in terms of the avoided
- 12 costs of motor vehicle collisions with above ground

13 poles. 14

15 In putting that forward as an incremental

16 benefit, we are saying over a 40-year time horizon

17 if you replaced what is there now with an entirely

18 undergrounded system for the urban areas in

19 question, the kinds of savings that you're likely to

20 enjoy in terms of the saving of lives and other

21 injury costs compared to keeping the existing system

22 with its rigid poles in place, you might look to

23 about a little more than half of the quantifiable

24 benefits flowing from those reduced traffic accident 25 consequences.

26

27 With respect to improved reliability of supply,

- 28 again, I remind you that this is a difficult number
- 29 to calculate, one in which you can't have a high
- 30 level of confidence. It could be in a considerable
- 31 range. One would have to rely on a lot more
- 32 detailed study and detailed information than we had
- 33 available in the time of this report to become more
- 34 confident about that, but indications are that that
- 35 might be somewhere around the 15 to 25 per cent mark
- 36 in terms of the share of incremental benefits
- 37 flowing from undergrounding.

38

- 39 As to the avoided maintenance costs, as I
- 40 mentioned, you might think of those really, on the
- 41 incremental cost side, as something you could take
- 42 away from the true costs of doing the undergrounding
- 43 project because there are some savings to
- 44 distributors and, in fact, it is probably in one
- 45 sense better to regard them as such, but to give you
- 46 a dollar order of magnitude idea, they sit there
- 47 around that 20 to 25 per cent mark and there is some
- 48 small contribution in terms of the reduced losses in
- 49 revenue to the distributors as a result of this.
- 50 That gives you some rough idea of where we might 51 look for the benefits and how important they might
- 52 be.
- 53
- 54 If you will recall my introductory points, one
- 55 of the interesting things about identifying and
- 56 quantifying the benefits is that it helps us also
- 57 focus our minds on this question of who should pay
- 58 and how should those costs be distributed across the .19/4/02 12

Transcript produced by ComputerReporters

## 1 community.

2

- 3 There are basically two approaches that are
- 4 adopted in any Government consideration of issues of
- 5 this kind. You can go in with a view of the world
- 6 that says impactors pay and some of the public
- 7 submissions reflected that view of life. That is
- 8 supported by the idea that this is rather like
- 9 polluter pays. Those responsible for the network
- 10 are inflicting incremental costs on society, so they
- 11 should pay for those costs in some sense. 12
- 13 This line of argument is one that really says
- 14 there are opportunities there for distributors to
- 15 underground. If they persist in maintaining a
- 16 system above ground, the costs that they are 17 inflicting on society as a result of that are not
- 18 being properly brought to account.
- 20 We considered that view and we've noted it and
- 21 noted the arguments behind it and passed those on to
- 22 the Tribunal. In the end, though, distributors have
- 23 inherited a system that is an above ground system
- 24 and that inheritance question, those legacy costs,
- 25 if you like, of the past, are there and you can ask
- 26 whether it's appropriate then for distributors and

27 perhaps electricity consumers to pay for the costs 28 of replacing that system when it is an inherited

29 system. 30

19

- 31 This kind of issue comes up not just in the
- 32 electricity field, I might add, but in the whole 33
- area of paying for water, for dams in the country, 34 things of this kind. It is a widespread question.
- 35 On balance, we feel that a beneficiaries pays
- approach is more appropriate, given that these 36
- assets and where they are and what they do are 37
- largely a legacy of what communities in the past 38
- 39 have enjoyed.
- 40
- 41 There will be opportunistic undergrounding
- whether a widespread proposal goes ahead or not, but 42
- 43 looking forward, it's more appropriate to say,
- "Well, if it's an undergrounding project that is 44
- 45 comprehensive, widespread, involving all large urban
- 46 centres in New South Wales, then it's appropriate
- 47 that the beneficiaries of that sort of project

50 If they do, who are they and how should they pay? We identified them in terms of beneficiaries

52 at the individual household level. There are

benefits that flow and can't be filtered down to

56 like avoided road accidents, could be said to be

57 benefits that accrue to the whole State in one way

58 another and then there are certain benefits to the

Transcript produced by ComputerReporters

54 individual households at a local community level and 55 indeed at a Statewide level. Some of the benefits,

48 should pay."

.19/4/02 13

49

51

53

1 service providers themselves.

- 2
- 3 If beneficiaries pays is an appropriate way to
- 4 go and certainly that was the view expressed in
- 5 the 1998 Commonwealth report on these issues if
- 6 that approach is adopted, then what principles
- 7 should we use in finding ways of imposing cost
- 8 recovery on those beneficiaries?
- 9
- 10 That brings us to the funding options that are
- 11 discussed in the Tribunal's report. There are three
- 12 main areas where Government can look to fund the
- 13 costs of a project of this kind. Utility charges
- 14 and levies that are imposed by the distributors, or
- 15 by someone else on their behalf, is obviously one
- 16 simple way to go and it has been emphasised that
- 17 this is a straightforward means of funding an 18 exercise of this kind.
- 19
- 20 The incremental gains of an underground system
- 21 to electricity consumers as consumers do not
- 22 constitute a large proportion of the benefits that
- 23 we could quantify. I think that is an important
- 24 point to be borne in mind when considering how
- 25 enthusiastic the community should be about funding
- 26 this thing through either straightforward changes to
- 27 the price of electricity or, indeed, some kind of
- 28 fixed capital levy imposed by the distributors. 29
- 30 We find that when you examine that sort of
- 31 approach it distorts electricity prices
- 32 unnecessarily and is likely to be inequitable, since
- 33 the main beneficiaries as electricity consumers are
- 34 those who gain in terms of reliability and that is 35 not at all evenly spread through the electricity
- 36 consuming community.
- 37
- 38 Local government rates and levies would be a
- 39 funding approach that picks up on the idea that
- 40 well, possibly only 30 per cent of the costs of this
- 41 program might be recoverable in terms of
- 42 guantifiable benefits. I will come back to that in 43 a moment.
- 44
- 45 If there is a significant shortfall between the
- 46 quantifiable benefits and the quantifiable
- 47 incremental costs of a project of this kind, where
- 48 must we look for the benefits to fund the program?
- 49 Surely those benefits have got to be the amenity
- 50 type benefits, the hard to quantify possibly
- 51 impossible to quantify benefits that are out there
- 52 that somebody must demonstrate are sufficient to 53 outweigh the costs.
- 54
- 55 If there is a large lump of unquantifiable
- 56 benefits out there and it is a beneficiary pays
- 57 approach and if those benefits largely accrue at the
- 58 local community level, then beneficiary pays
- .19/4/02 14

Transcript produced by ComputerReporters

1 suggests that local Government rates and levies is a 2 sensible place to look for a fair share of the

3 funding of an exercise of this kind.

4

5 Then there are State Government subsidies from 6 consolidated revenue and we discussed those in some 7 detail in the report. The problem with these is 8 that if you use Statewide taxes to fund a program 9 that has largely local benefits, then you're going 10 to have country taxpayers cross-subsidising urban dwellers and to quite a considerable dollar value in 11 12 this case. 13

- 14 Some combination of the above might be
- 15 appropriate if we think there are sources of
- 16 benefits that are individual community centred and
- 17 statewide. It presents us with a more complex
- funding option but it would have the advantage of 18
- 19 fairness in applying the beneficiary pays approach. 20
- 21 I would like to close with an observation that
- 22 in my view it is the obligation of governments in
- 23 considering projects of this kind to indulge to the
- 24 extent they can in some kind of formal benefit cost
- 25 analysis of the project, even where it is very hard
- to measure benefits and where at an initial level at 26
- 27 least the costs are also hedged by uncertainty. 28
- 29 There is an obligation to look there for an
- answer to the question, what are the incremental 30
- 31 costs of doing something like this, are they matched
- 32 by the incremental benefits, and if we can only find
- quantifiable incremental benefits that are a 33
- 34 fraction of the quantifiable costs then we have to
- 35 look very carefully at how other evidence might be
- 36 brought to bear to say, yes, a program of this kind 37 is justified.
- 38

56 benefits.

.19/4/02 15

57

- 39 Jeffrey has put in front of you some very
- 40 preliminary broad costs of doing this kind of thing.
- 41 From the point of view of an optimised approach, as
- 42 he explained, we have to subtract from the point of
- 43 view of finding what sort of a gap has to be funded
- 44 here, we have to subtract from those costs any costs
- 45 that the distributors themselves would avoid by
- 46 going underground. One such cost is the cost of
- 47 replacing the existing system. As you go forward
- 48 you are going to avoid some costs of replacing what
- is there. Just how big that is is a moot point as 49
- well. It is going to vary with the way in which you 50
- 51 replace the existing system as much as anything else
- 52 but one needs to subtract that from the first cost estimate to decide what these incremental costs are
- 53 54 of putting things underground. Then you need to
- 55 compare that with the quantifiable incremental

58 What we have done is quantify as best we could

1 those incremental benefits. Our preliminary view is 2 that when you look at one compared to the other and 3 you say to yourself, out of every dollar of 4 incremental costs how much is likely to be there 5 offset by quantifiable incremental benefits, if you 6 ask that question, for every dollar of incremental 7 costs of undergrounding how much is likely to be 8 offset by quantifiable incremental benefits, you 9 can't be terribly certain in the answer to that, it 10 could be as high as about 33 cents in every dollar, 11 it could be less than 10 cents, depending on how 12 optimistic or pessimistic you are about various 13 assumptions. 14 15 The point is there is a big gap in every dollar 16 in what is, if you like, covered by incremental 17 benefits and that is the sort of thing that 18 government has to take into consideration in going 19 forward in its deliberations on a project of this 20 kind. Thank you. 21 MR COX: Thank you very much for a clear presentation on 22 23 what I think is a very difficult area. We will now 24 move onto the panel session and we ask our experts 25 to make brief presentations one after the other. 26 The first is David Neville from Integral. 27 28 MR NEVILLE: Integral energy is pleased to be given this 29 opportunity to present its views on IPART's interim 30 report on the undergrounding of electricity in New 31 South Wales. Integral supports the overall proposal 32 to underground electricity distribution assets in 33 urban areas of New South Wales. Like most attendees 34 at this forum, we agree that the undergrounding of 35 electricity cable is preferable to overhead lines 36 due to the benefits that result in terms of improved 37 safety, reliability, visual impact and maintenance. 38 39 While it is perhaps easier to identify the 40 issues that stakeholders agree on in terms of the 41 benefits of undergrounding, the real difficulty as 42 has been noted in the earlier presentations is in 43 building agreement across various stakeholders on 44 the relative costs and funding arrangements for a 45 large scale undergrounding program. For these 46 reasons Integral recognises the complexity of the 47 task undertaken by IPART and its consultants in a 48 short time frame and welcomes the interim report as 49 a serious attempt to quantify the costs and benefits 50 as well as outlining a reasonable approach to the 51 funding of undergrounding. 52 53 It is also important to note that the New South 54 Wales electricity industry has been proactive along 55 with local councils and developers in undergrounding 56 of electricity assets in new developments over the 57 last three decades. In Integral's case, this has 58 resulted in approximately 39 per cent of low voltage .19/4/02 16

Transcript produced by ComputerReporters

1 mains and 17 per cent of high voltage mains being 2 placed underground. 3 4 In relation to IPART's interim report, Integral 5 and the other New South Wales distributors believe 6 there are some issues with the methodology used 7 particularly in relation to the optimally planned 8 network scenario. 9 10 An area of concern is the after diversity maximum demand figure of 2.6MVA used in the report. 11 12 Integral believes this figure, which aims to measure 13 average capacity for the average home, is 14 understated, in our case due mainly to the increased 15 use of air conditioners in Western Sydney. Our 16 experience indicates that for design purpose an ADMD 17 of 7kVa per customer or greater would be more appropriate. The use of the higher ADMD figure will 18 impact on the costs derived from the optimally 19 20 planned network model. 21 22 Integral and the other New South Wales 23 distributors would like to work with IPART to 24 resolve these issues prior to the release of the 25 final report. Despite these issues, Integral 26 accepts that the costs in the interim report 27 represent broad estimates of the order of magnitude 28 of the costs of undergrounding and further work is 29 required to provide firmer estimates on these costs. 30 31 We also note that the estimated costs of 32 undergrounding are considerably greater than the directly quantifiable benefits. As the costs quoted 33 in the report clearly outweigh the benefits, 34 35 ensuring funding options match benefits and beneficiaries is a key issue. Integral supports 36 37 IPART's observation that the key benefits of 38 undergrounding accrue to the local community and the 39 wider public. We therefore support the beneficiary 40 pays principle as the most efficient and equitable 41 means of allocating costs at the local level, to 42 members of the community who would derive most 43 benefits from undergrounding. 44 45 Based on the interim report the beneficiary 46 pays principle would involve 80 per cent of 47 undergrounding funding being collected via local 48 council rates or levies. We believe this approach 49 is preferable to the use of electricity charges for 50 this purpose. The use of electricity charges would 51 considerably distort relative prices and, as the 52 tribunal has noted, such an approach distorters the 53 funding mechanism from the allocation of cost 54 recovery on the basis of benefits derived. 55 56 We also strongly support IPART's proposal that 57 communities that place a relatively low value on the

58 local benefits of undergrounding should be given the .19/4/02 17

1 choice of opting out. While the issue of overhead

2 electricity lines is a concern for many members of

3 the community, there are likely to be significant

4 differences in individuals' willingness to pay for

5 undergrounding projects both within a local 6 government area and between local government areas.

7

8 We and the other New South Wales distributors

9 believe the current work that is being undertaken on

10 willingness to pay in relation to the next network

11 determination provides an opportunity to understand

12 and value customer preferences in relation to

13 undergrounding and other projects designed to

14 enhance network performance.

15

16 As the benefits of undergrounding are more than

17 just service related and the gap between benefits

18 and costs is substantial, it will be important to

19 establish whether customers within local communities

20 are prepared to pay the difference between the costs

21 allocated to other stakeholders and the overall

22 costs.

23

24 On this point we agree with IPART's observation

25 that without evidence on how members of local

26 communities value the benefits of undergrounding it

27 will be difficult to apply the principle that a

28 community should receive the level of undergrounding

29 that it is willing to pay for. We believe the

30 willingness to pay study that has been developed

31 presents an opportunity for IPART, local government

32 and the electricity distributors to work together in

33 gathering evidence required to support a large scale

34 undergrounding program in New South Wales.

35 37

36 Thank you.

38 MR COX: Thank you.

39

40 MR WELLSMORE: Good morning, all. I represent the Public 41 Interest Advocacy Centre. We have made a written 42 submission to the tribunal on these matters which 43 perhaps some of you have read. Can I just say at 44 the outset that we are not in principle opposed to 45 the idea of undergrounding electricity networks at 46 all. In fact, in our submission we made the point 47 that we saw some scenarios and some particular areas 48 within the metropolitan or urban areas of the state 49 where undergrounding would not only be feasible but 50 perhaps even desirable, and that is even taking into 51 account the difficulties that Ross Chapman has just 52 pointed out about quantifying in economic terms at

53 least the benefits in some of those cases, visual

54 amenity and so forth.

55

56 It is not that we have got a set against

57 undergrounding. Our issues are a bit more complex

58 than that. Firstly, I think, is the question about

.19/4/02 18

Transcript produced by ComputerReporters

1 the choices that we face as a community about 2 allocating funds and whether the enormous, at least 3 in our view, amount of money that would need to be 4 committed to a universal roll-out of undergrounding 5 might not be better spent in some other way.

6 7 It is about opportunity costs I suppose, as the 8 economists would tell us, and every dollar we put 9 into undergrounding is \$1 we don't have to spend on 10 something else. A 40-year roll-out would mean that the opportunity cost is fairly small. 40 years 11 12 seems like a long time and obviously the per annum 13 cost is low. On the other hand, certainly we are 14 mindful that this is at the end of the day a 15 political decision and where I guess we are wary is 16 that a 40-year time line is probably not 17 particularly feasible in political terms, that there will be a lot of pressure for a political decision 18 for a much shorter time span. 19 20 21 Certainly for those people who are paying, they 22 will want to get the benefits much quicker than 40 23 years, I suggest. Conversely, let's say the 40-year 24 figure holds up, that might be good. Our concern then would be that in fact some people will in fact 25 26 pay and still be waiting to get the benefits or 27 indeed that at some point the temptation will be to 28 say, look, we have done enough, we will stop now, 29 enough people in the community are happy, we can 30 call it a day, finish the undergrounding; and those 31 who have paid will never see the benefit. 32 That is the way decisions get made about

33

distributing the benefits. Benefits is a tricky 34

35 thing, as Ross outlined, but certainly from what we

36 have seen in the report from the tribunal and in

37 this morning's presentations, costs, whilst

38 difficult to quantify, seem very much in our view to

39 outweigh the benefits. We concede not for some

40 areas or for some members of the community, but in

41 broad terms it seems to us that for most people the

42 costs of undergrounding will be much greater than

any benefit that they will receive in turn.

43

44

45 That is why we have been very pleased to see

46 the work the tribunal has produced and we are very

47 supportive of the outcome that it is proposing in

48 its draft decision, the draft report, to align

49 beneficiary pays. I suppose partly we support that

50 from the perspective of I guess implicitly designing

51 a scheme and the fact that it essentially reflects a

52 current opportunity that the community already has

53 and in some cases has taken up for beneficiary pays

54 for very localised undergrounding where

55 distributors, local government and residents have

56 seen, in their individual cases at least, their

57 specific circumstances, that they are prepared to 58 stump up the money to cover the cost that they .19/4/02 19

1 believe in their case they are prepared to carry 2 because of the benefits that will be commensurate 3 with that. 4 5 At the end of the day, from our point of view 6 it is really the issue about people not being asked 7 to pay for a benefit that they won't get or not 8 being asked to pay when they can't afford it and it 9 may in fact be the case that, look, over 40 years 10 no-one will really notice the extra money on their 11 electricity bills, that is fine, but if some areas 12 of the community are seriously convinced that they 13 will benefit from undergrounding, well, we think 14 that is fantastic and we think that there are 14 15 opportunities already in place for those people to 16 realise those benefits. 17 17 18 We would be very concerned that those benefits 19 are not actually being, if you like, subsidised and 20 certainly funded in some way by other members of the 20 21 community who do not have the same opportunity to 22 realise the same benefits. Thank you. 22 23 MR COX: Thank you very much. The next speaker is 24 25 Lynton Jamieson from EnergyAustralia. 25 26 27 MR JAMIESON: Mr Chairman, ladies and gentlemen, thank 27 28 you first of all for the opportunity to participate 28 29 in this very important debate for the community in 29 30 30 the way we move forward. It's sometimes unfortunate 31 that we are where we are in history and we would 31 32 like to change lots of things. Of course, we would 32 33 all like the complete network underground as soon as 33 34 possible. 34 35 35 36 However, it has 100 years plus of history there 36 37 and, as Jeffrey pointed out before, it is a little 38 bit like Paddy's axe, it has the same head maybe but 38 39 it has a different handle, or it has a different 39 40 handle and a different head, but it is still Paddy's 40 41 axe, and that is what the network is and that is 42 what the underground network is. We are where we 43 are and we are just continually rebuilding parts of 44 that network so the age of the distribution of that 45 across the network is quite variable. It is a very 45 46 complex issue. 47 48 Just to go to a few points I would like to 49 support in the draft report so far that has been 50 presented today, we believe that the 40-year time 51 frame referred to in the report is realistic. It is 51 52 something that enables us to move forward and work 53 out how we are best able to do this and how the 54 community is prepared to actually accept the way we 55 move forward as well. 56 57 The time frame would need to be linked very 58 closely and tested against community expectations. .19/4/02 20

Transcript produced by ComputerReporters

1 Community expectations are very wide and very 2 varied, as are those expectations of the various 3 other stakeholders in this debate. We support the 4 beneficiary pays approach. We believe that because 5 this primarily is going to be done on a small sector 6 basis, whilst it is an overall plan of where we want 7 to be in 40 years time, that we would be delivering 8 such a program on a sector basis and therefore the 9 beneficiary pays approach and utilising local 10 councils who have very good understandings of 11 representations and negotiation skills, et cetera, 12 with the local community already established, that 13 that would be a very good way to go to move forward. 15 To move forward we would need a formal 16 undergrounding program that would identify what areas need to be done first in what order. You 18 can't deliver it all tomorrow. That would be 19 community debate that would determine which areas get done first and how these areas get done, in what 21 form. 23 Over a 40-year period it would be expected, of 24 course, that the way we do things would change. It would have to be reiterative. Technology changes 26 over a period, people's expectations change over a period, so it would have to be a very robust process in place where we could get feedback from the community and the other stakeholders. We believe again, based on that, the local councils are a very good representative of the local community. We would also support strongly the use of a pilot program. EnergyAustralia has a considerable 37 history and considerable experience in undergrounding, but on a fairly small scale if you compare it with the scale of the projects that are being considered here. But we believe that pilot 41 programming over the next 12 months or so would be 42 advantageous to get a better handle on the issues 43 involved and also how we would negotiation with the 44 local community for doing that. 46 It would also give us a better feeling of what 47 the span of actual costs may well be in a larger 48 scale program so, as I said, we primarily do smaller 49 scale programs, not something that is on a large 50 scale like we are talking about here. 52 That leads me on to the costings, which are 53 very variable. It has been talked about today that 54 they are broad estimates only. We would agree that 55 they are broad estimates only and we need to move 56 forward and look very closely at what those various 57 inputs are to the determination of those costs and 58 those estimates and what the risks are if we get .19/4/02 21

1 some of those costings incorrect. 2 3 As you appreciate, the costs of actually doing 4 work on a greenfields site are vastly different to 5 going in and retrofitting. If any of you have done 6 old houses up you will realise that you can actually 7 start doing things and then you get part way down 8 the track and you find out that you have to do 9 things slightly differently. It does not always 10 come out the way you estimated in the first place. 11 12 We support much closer scrutiny of costings, a 13 pilot project that would enable us to get a better 14 handle on where these costings might be variable or 15 not, and do that as soon as possible. Thank you 16 very much and I welcome questions during the panel 17 session. 18 19 MR COX: The next speaker is Peter Downey from Sydney 20 Cables Downunder. 21 22 MR DOWNEY: Thank you, Mr Chairman. Unfortunately I am 23 going to have to talk fairly fast, so I apologise 24 for that. First of all, let me say that this is a 25 very good report, but it is an academic one. The 26 problem is that academic reports don't address the 27 issues of real people in the real world. The real 28 issues are about winners and losers. If we get this 29 right, everyone will win. If we get it wrong, 30 everyone loses. 31 32 With this report, only those in the leafy North 33 Shore will afford it and not want to opt out, and 34 that creates a whole heap of problems, including one 35 of social equity. Before anyone gets this wrong, I 36 live in one of the northern suburbs. 37 38 Let's address the cost. The cost of burying 39 electricity cables is not \$5,000, it is between 40 \$1,800 and \$3,000, so let's take the median \$2,400 41 per property, less the cost savings. Amortise that 42 over an anticipated life of the project and we are 43 talking peanuts, but there are those in the 44 community, pensioners and those doing it tough, for 45 whom this is a lot of money, yet there is nothing in 46 the report that addresses this. So if I have to pay 47 a few more peanuts for something that is socially 48 equitable, so be it. 49 50 What we are seeking is an inclusive program, 51 not an exclusive one. The report says that you can 52 opt out, but what we need is a program that is 53 affordable and gives everyone a reason to want to 54 opt in. If an area is opting out you destroy the 55 economics of the project, remove the ability to 56 redesign the network and gain maximum efficiencies 57 that benefits everyone, whether it is overhead or 58 underground, and you create an administrative .19/4/02 22

Transcript produced by ComputerReporters

## 1 nightmare.

2 3 What if you pay to have your poles removed yet 4 on the way to work you run into a pole in an area 5 that opted out. You would be pretty mad. In fact 6 you would be more than mad, you would be dead! But 7 then it says that the money could be better spent on 8 a road safety program. Well, please show me a road 9 safety campaign that has worked and continued to do 10 so. If they worked, we would not have speed cameras 11 or double demerit points. This is not just about 12 driver attitude but about the environment of our 13 roads which accounts for around 10 per cent of total 14 road fatalities. 15 16 A policeman once told me the worst collision 17 you can have is with a power pole because they are 18 hard and unforgiving. They concentrate the full force of the collision over a small area and they 19 20 rip and tear through the car right into the 21 passenger compartment where you and your family are. 22 23 And where are those poles? Right behind the 24 kerb, waiting should you swerve to miss a kid who 25 runs onto the road or a soccer ball that rolled out onto the road. 26 27 28 The report also says there are no economic 29 benefits during the construction phase. Then where 30 did the building booming come from during the 31 Olympics? Was it a myth. This is the real world, 32 not something out of a textbook. 33 34 I also note that the report talks about 35 underground cable limiting competition. But 36 something like 20 per cent of Sydney is already 37 underground and this is increasing. So where is 38 that argument going? Are we to accept an increase 39 in the existing overhead cables in the name of 40 competition. 41 42 Let me turn to the communications cables, and 43 please, the people from that area, I am not having a 44 go at you here, but it raises a hole host of other 45 questions. The cost is round \$2,000 to bury. 46 Costwise this is a separate issue, these are private 47 companies, and that raises some interesting points. 48 49 If you don't use these services, do you still 50 have to pay for them; or if you have paid to have 51 them buried does that constitute a change of 52 ownership of the cable from the carrier to you; or 53 is it a government subsidy of a private company; or 54 should it be seen as a legitimate cost in capital 55 works and upgrading and the cost spread evenly

56 across the total cost and revenue base of the

57 carrier? What are the tax implications? After all, 58 the current cable must have been written off years .19/4/02 23

- 1 ago but now they can start again. 2
- 3 I am not saying these companies should not be
- 4 treated with sympathy or helped. It is just that it
- 5 is a separate issue and needs to be treated
- 6 accordingly.
- 7
- 8 Let me now turn to the collection of the levy.
- 9 It is recommended that councils should collect 80
- 10 per cent of the cost, but that would add to the cost
- 11 and complexity. You would have 50 or 60 councils
- 12 investing in new systems and hardware, yet they have
- 13 nothing to do with power. They issue dog licences,
- 14 building permits and pick up the garbage. They
- 15 don't distribute power. So why not have the six or
- 16 so energy distributors involved, add a single line
- 17 to their account showing the cost, and then a second
- 18 line showing the cost saving of not having to
- 19 mutilate trees and fix termite infested power poles. 20
- 21 Finally, this is not an issue about economics.
- 22 We have always known that at Sydney Cables
- 23 downunder, not because the argument is not sound, it
- 24 is just that the data is not there because no one
- 25 has ever recorded, collected it or collated it.
- 26 Believe me, we have tried. So let's put that
- 27 argument aside side for a moment.
- 28

29 This is an issue about a vision, a dream. I

- 30 was told not to use that word, that it would send
- 31 the wrong message, but if Martin Luther King can
- 32 have a dream, why can't we? The mayor of New York
- 33 had a vision or dream, in 1884 he took an axe to
- 34 that city's power poles. But even he was preceded
- 35 by London in 1882, while Paris and Rome followed
- 36 later, so where does this leave us?
- 37

- 38 This is a vision about clean, safe, uncluttered
- 39 streets adorned by beautiful trees that wildlife can
- 40 populate and kids can climb. It is about a safe and
- 41 reliable supply of electricity devoid of blackouts
- 42 whenever one of our ever increasing storms happens
- 43 along throwing thousands of people out of work for
- 44 up to a week. And if you think the situation will
- 45 improve, I ask you to think again, because we are
- 46 now experiencing a climate change that will only
- 47 make it worse.
- 48
- 49 It was reported that Bob Carr once had a dream,
- 50 that soon after becoming Premier he looked out of a
- 51 window at a pole and thought, "God, that is ugly, I
- 52 have the power to have it removed but if I did so,
- 53 it would be an abuse of my powers", so the pole
- 54 stayed. Well, Bob, come and talk to us and we will
- 55 show you how to get rid of your pole and ours at the
- 56 same time because if Premier Carr doesn't do it,
- 57 then Premier Brogden or some other Premier will, 58 which means we will being back here again in six
- .19/4/02 24

Transcript produced by ComputerReporters

- 1 months or two years and the whole thing will start
- 2 over again, so let's get it right the first time.
- 3 Thank you. 4
- MR COX: Thank you, Peter. The next speaker is Warren 5
- 6 Taylor, from the Local Government and Shires
- 7 Association.
- MR TAYLOR: Thank you, Mr Chairman, for the opportunity 9
- to speak to you today and welcome to everybody. It 10
- is of course an early stage for the Association of 11
- 12 Local Governments to have any firm policy on the
- 13 process. We believe we are disadvantaged by having
- 14 a steering committee that doesn't have any local
- 15 government representation on it.
- 16

25

8

- 17 There is membership on the technical committee
- 18 in the form of three local government people and a
- gentleman from the Department of Local Government 19
- 20 but in light of the report recommending as a last
- 21 resort, I guess, that local government rates bear
- 22 80 per cent of the revenue bearing process, we
- 23 believe there should at least be membership in the
- committee that makes those sorts of decisions. 24
- 26 There have been two main issues in local
- 27 government in recent times. There have been many
- 28 more issues than two but I want to refer to two of
- 29 them. One relates to tree vegetation management. I
- 30 have been inundated by more than 100 councils around
- 31 the State in the last 12 months about the tree
- management requirements of energy distributors, 32
- relating mainly to introduced trees and the 33
- 34 requirement that councils have tree management
- 35 practices to overcome what we believe are problems
- 36 of the distributor in the first place. 37
- 38 Those costs are very significant. In leafy
- 39 Wahroonga, for instance, tree management is an
- 40 accepted discipline by that particular council in
- 41 some streets because of the heritage value of those

46 between the energy distributor and the council - and

vandalism - tree management is a significant problem

within local government and within the community.

- 42 trees.
- 43

49

50

51

52

.19/4/02 25

44 In some cases where tree management has not 45 taken place because of a difference of opinion

47 I can think of three locations, North Sydney,

48 Holroyd and Marrickville where there have been

significant concerns in recent times about tree

53 The Association suggests that the IPART report

55 bring into account those significant costs. In the

57 they are probably twice the extent than have been

Transcript produced by ComputerReporters

58 quoted by Mr Chapman today, in our view.

54 and the figures that have been quoted in that do not

56 long term we believe they would be avoided costs and

- 1
- 2 We have been unable to obtain those direct
- 3 costs because they come in three different levels.
- 4 There are costs paid by councils direct under
- 5 dispute on introduced trees. They are the costs
- 6 paid by the energy distributors themselves, when
- 7 there is a priority emergency situation, in an
- 8 attempt by them to try and negotiate the situation
- 9 with councils. In the third area there are those
- $10\$  trees that no-one is touching at this stage and they
- 11 are becoming a time bomb in terms of future
- 12 maintenance and future management.13
- 14 We believe that one of the criteria in the
- 15 report should really look at trees and tree
- 16 management and we believe further information should
- 17 be sought to go in that direction.
- 18
- 19 The associations and councils have also for a
- 20 number of years wanted to have the undergrounding of
- 21 cables accelerated and the Minister for Energy has
- 22 steadfastly refused to take on the suggestions made
- 23 by councils. Councils did suggest that energy
- 24 distributors be required to do a five year
- 25 management plan and that it be required for each
- $26\;$  council area that they indicate in their annual
- 27 report what plans they've put in place for
- 28 undergrounding.
- 29
- 30 We recognise that that is probably a blank spot
- 31 on the report but that was the purpose of the
- $32\;$  exercise, to draw to the public's attention the fact
- $33\;$  that undergrounding plans rarely take place by the
- 34 sole initiative of and financial payment by energy
- 35 distributors.
- 36
- 37 For a long time also the associations have been
- 38 supportive of there being some pilot projects,
- 39 because we heard of the costs in the report at the
- 40 Commonwealth level a number of years ago and we've
- 41 advocated some physical program pilots be 42 undertaken.
- 43
- 43

44 We are supportive of the process that is

- 45 currently being discussed by energy distributors and
- 46 councils for a number of pilot programs to go into
- 47 place because we believe they will uncover exactly
- 48 the range of direct and indirect costs that have
- 49 been discussed today, possibly at an academic level.
- 50 We support that process.
- 51
- 52 However, we are concerned that those pilot
- 53 projects close on 8 April. Yes, the period of time
- 54 has been extended. We don't know how long it has
- 55 been extended to because that extension date hasn't
- 56 been determined. We are also concerned that there's
- 57 no criteria yet adopted for that pilot program. How
- 58 will the actual locations be selected?
- .19/4/02 26

Transcript produced by ComputerReporters

1

2 I am hearing from councils every day at the

- 3 moment with ideas, with programs that they have in 4 mind to be included and really, I can do nothing
- 5 more than refer them to the energy authority
- 6 relative to that particular council area.
- 7

8 I am told that the steering committee will be

- 9 the authority that determines which of those pilot
- 10 programs will be adopted. Local government does not
- 11 have representation on that steering committee and
- 12 the criteria has not been adopted. Therefore, local
- 13 government considers rapid changes need to be made
- 14 in that area.
- 16 There has also been very little attention given
- 17 to street lighting and whilst the associations and
- 18 local government and many people in the community
- 19 advocate removal of poles and Mr Downer earlier
- 20 spoke about poles near the curb line, the fact of
- 21 the matter is current street lighting in many
- 22 locations is not up to the Australian Standard.
- 24 In some cases I don't know that is possibly
- 25 a deliberate decision because of the costs involved
- 26 of paying for electricity which is not metered. I
- 27 go back to my Burns Road, Wahroonga example where
- 28 plane trees and a very beautiful streetscape would
- 29 not permit street lighting to be put into place at
- 30 the Australian Standard.
- 31
- 32 Who would provide the new street lights if it
- 33 was obligatory for street lights to be done at the
- 34 Australian Standard or if councils chose not to
- 35 adopt that standard when everything else was
- 36 undergrounded, would that attract some public
- 37 liability issue upon the council?
- 38

44

47

48

49

52

56

57

.19/4/02 27

- 39 We believe there are a lot of issues yet to be
- 40 discussed and whilst there is a technical committee
- 41 to look at those, it will take time and it will take

45 Beautification and tree management are issues

Grafton, for instance, with its lovely rows of

50 automatically detract from what is after all very

53 Having expressed those few thoughts, thank you,

54 Mr Chairman, for the time you have given me and

55 we'll hear how the matter progresses. Thank you.

Transcript produced by ComputerReporters

58 speaker is Judy Anderson from Optus.

THE CHAIRMAN: Thank you very much, Warren. The next

jacaranda trees, would be very reluctant to put in a

high tech street lighting process because that would

46 that also deserve further attention. I know

51 much a tourist situation.

- 42 a fair bit of concerted effort to come to those
- 43 situations.

1 MS ANDERSON: Thanks very much to IPART for inviting me 2 3 to speak today. I know the undergrounding of 4 overhead cables and the existence of overhead cables 5 is something that is dear to the hearts of people 6 here in New South Wales. 7 8 Optus has a valuable network which is installed 9 nationally - it is in Melbourne, Brisbane and 10 Sydney - and we find our network --11 12 SPEAKER: In the face of much community opposition. 13 THE CHAIRMAN: Can you let her talk please? We will 14 15 come to your points later on. 16 17 MS ANDERSON: I recognise that the people of New South 18 Wales aren't happy about overhead cables. Our 19 broadband network is important to us and basically 20 that is why we welcome this review and a close 21 examination of all the issues. 22 23 Optus's key issue with the IPART report is 24 basically that any decisions about undergrounding 25 will impact on telecommunications carriers and these 26 issues need to be considered carefully and made more 27 prominent in the report. 28 29 Where principles are adopted about the 30 undergrounding of overhead cables and decisions are 31 made about who benefits and who should pay according 32 to those benefits, basically the telecommunications 33 carriers should be included in this. 34 35 Questions have been asked to the effect of why 36 can't the telecommunications carriers carry the 37 costs of undergrounding overhead cabling? We were 38 not the ones who initially installed this overhead 39 cable. We would have undergrounded the cable if we 40 could. The reason why we couldn't is twofold. 41 Often there wasn't enough capacity in Telstra's 42 existing ducts and also it would have basically 43 doubled the cost of building the network. 44 45 The network is broadband and the provision of 46 broadband services is very costly. It involves high 47 capital costs and it takes a long time to recover 48 those costs. That is why there has been a lot of 49 coverage in the press lately about the network. 50 What is happening on our network is that we're still 51 recovering the costs of installing that network and 52 that takes a long time. 53 54 The network isn't really making us any money. 55 Basically, Optus is constantly reviewing the 56 viability of our network and if we're forced to pay 57 for the costs of undergrounding, its viability would 58 be threatened. It won't just be threatened in New .19/4/02 28

Transcript produced by ComputerReporters

1 South Wales, it will also be threatened nationally. 2 We basically can't afford to pay for the 3 undergrounding of the network. 4 5 SPEAKER: It should never have been there in the first 6 place. 7 THE CHAIRMAN: Do be quiet, please. I think we should 8 allow her to continue. 9 10 11 MS ANDERSON: I understand your concerns. I know it 12 is ---13 14 SPEAKER: Well, do something about it. 15 16 MS ANDERSON: In conclusion, Optus has been working with 17 the New South Wales Government and particularly 18 IPART and the Ministry of Energy in looking at this 19 issue and it will continue to do so. We are happy 20 to participate in forums and discussions, wherever 21 we can, to look at the issue closely and to make 22 sure all the issues are examined and decisions are 23 made in the appropriate manner. Thank you very 24 much. 25 THE CHAIRMAN: Thank you. The next stage of the hearing 26 27 involves moving on to comments and questions from the floor. I suggest before we do that that we take 28 29 a very quick five minute break. You can get up, 30 stretch, talk to someone else, but don't go too far 31 away because we want to hear your comments. We 32 would like you to be back here in five minutes. 33 Thank you. 34 35 (Short adjournment) 36 37 THE CHAIRMAN: Ladies and gentlemen, I would encourage you to resume your seats. The way we'll do this is 38 39 if you want to ask a question or make a statement, 40 put up your hand. Renee will walk around and give 41 the microphone to you. Could you then introduce 42 yourself and name the organisation you represent, if 43 you do represent an organisation. 44 45 If you want to make a statement, that's fine. 46 If you want to ask a question we will ask the 47 particular panel member involved to respond to it. 48 In the case of general discussion, I think we'll let 49 that flow. We will let one person follow another 50 and we'll end up with some final comments on the 51 questions. If there is someone from the audience 52 who would like to ask the first question, please put 53 up your hand. Yes, please, sir. 54 55 MR WOODS: I would like to make a brief statement and 56 then ask a very brief question. My name is

57 Bill Woods and I am a communications consultant. I 58 was astounded by the submissions of both Telstra and

.19/4/02 29

1 Optus. They gave the impression that they were 1 As part of the war the next battle has to be 2 refugees from the Third Reich because they seemed to 2 the sort of thing that you're talking about. From 3 give the impression that they were going to last one 3 our perspective, we would like to see them designed 4 thousand years. 4 out in the network, but we are to some degree 5 getting down to the detailed stage. I think it is 5 6 The fact is that both of these networks are 6 very good that you have raised it but I really 7 virtually archaic and hybrid. Coaxial optic fibre 7 believe that that's where it fits in. 8 is technically obsolete and will need to be replaced 8 9 in a very short number of years. I can see no basis 9 It has to be discussed at a later stage. We 10 for any compensation to these companies. 10 are currently just looking at the overall concept at 11 11 this stage and as was said, they were following the 12 My other question related back to undefinable 12 directions that were given to them by the Minister. 13 benefits and that is if Sydney wishes to remain a 13 If you don't like it I'd suggest you write to the 14 regional hub, to remain a First World centre in this 14 Minister. 15 region, it has to have modern, up-to-date 15 16 distribution facilities and for suburbs such as the 16 THE CHAIRMAN: Thank you. Another question? 17 Eastern Suburbs, the North Shore, et cetera, which 17 18 are the hubs of the high tech areas of Sydney, to 18 MR DOWNING: Could I ask one more question? 19 remain with an archaic Third World distribution 19 20 20 system seems to me astounding. THE CHAIRMAN: Yes, one more very quickly. 21 21 THE CHAIRMAN: Do you want to respond, Judy? Not at MR DOWNING: Hopefully, it is not in 41 years that we 22 22 23 this stage? Next question. Yes, please, over 23 discuss that issue. On page 23 of the report you 24 there. 24 talk about reduction of lost revenues and I would 25 just like to investigate whether there is a flaw in 25 MR DOWNING: My name is Rob Downing and I am an 26 26 the assumptions. 27 interested electricity consumer. I would like to 27 28 ask a couple of questions through the Chairman. I 28 You are talking about revenue losses in the order of \$500,000 to \$700,000. The assumption is 29 would like to know why the scope of the Terms of 29 30 Reference did not include high voltage 132kV 30 that undergrounding will take losses from 31 undergrounding, particularly in relation to their 31 5.5 per cent down to 4 per cent of the energy that's 32 health effects or potential health effects. input into the network. On my calculation that 32 33 would mean that over 40 years we're assuming that 33 34 MS TOWERS: The Minister for Energy tasked us to look at 34 energy input is of the order of \$40m. That is the 35 low voltage undergrounding only. You would have to 35 100 per cent calculation. I would have thought 36 inquire of the Minister as to high voltage 132kV. 36 there would be a couple of extra noughts on that. 37 37 38 MR DOWNING: Could I ask the gentlemen from Meritec 38 MR CHAPMAN: I think there may be an issue as to how 39 whether he believes high voltage 132kV would benefit 39 you're interpreting these numbers. These are 40 by being included in the scope? 40 present value numbers here. They are the result of 41 41 discounting over 40 years. MR WILSON: Mr Chairman, the principal driver of costs 42 42 43 is low voltage connections followed by high voltage 43 MR DOWNING: I understand that. 44 mains, which are principally at 11kV. The higher 44 MR CHAPMAN: We can undertake to have another look at 45 level voltages have some consequential impacts but 45 46 they're not the focus of the study and they wouldn't 46 that but I wouldn't move away from these numbers at 47 be in a study of this sort. 47 this stage. 48 48 49 THE CHAIRMAN: Do you want to add something, Peter? 49 THE CHAIRMAN: Another question? There is one at the 50 50 back. 51 MR DOWNEY: There are a whole lot of things that haven't 51 52 been included but I think that if we look at this as 52 MR VINEY: My name is Allen Viney, I am a private 53 a war then this is a battle and the first battle is 53 citizen but also a former member of the New South 54 to get the principle accepted. I look around here 54 Wales Parliament and that's where the start of my 55 today and it's obviously accepted by a large 55 interest in this comes. I want to give a little bit 56 cross-section in the community, otherwise you 56 of history and go back to the days when county 57 wouldn't be here. 57 councils ran the electricity system before we got 58 bigger and bigger corporatised bodies that you can't 58 .19/4/02 30 .19/4/02 31 Transcript produced by ComputerReporters Transcript produced by ComputerReporters

1 deal with.

- 2
- 3 In my area we had two councils covering the
- 4 Mackellar County Council and there was a progressive
- 5 move for undergrounding. It was going on all the
- 6 time because the citizens wanted it. You could
- 7 reach around and get your hands around the throats
- 8 of local councillors and they got the message
- 9 through to the county council and it worked.
- 10
- 11 We've lost that. The late Pat Morton was the
- 12 Minister for Local Government. He lived in Mosman
- 13 and that was his electorate. Mosman is
- 14 undergrounded. The Minister said "Do it" and it was
- 15 done. There was no argument. Everybody shared the
- 16 cost and in Mackellar those of us who didn't have
- 17 the undergrounding still got the benefits when we
- 18 went shopping and saw good tree-lined streets that
- 19 weren't being hacked around.
- 20
- 21 We've been there, we've got the experience of
- 22 undergrounding, but maybe it has all been forgotten
- 23 by the new people who have taken over the
- 24 electricity distribution system.
- 25
- 26 I raise the question of benefits. What
- 27 estimate was made of the future of
- 28 telecommunicating? More and more people will work
- 29 at home and their computers have got to be working
- 30 otherwise the system breaks down, if there's no
- 31 power you've got no computers, so you're cutting
- 32 right across the future progress of keeping the size
- 33 of Sydney in check and giving more people a better
- 34 economic return through telecommunicating.
- 35
- 36 The next question is what estimate was made
- 37 about avoiding litigation costs? For a long time
- 38 the electricity industry thought it was inviolate
- 39 and then an invalid pensioner took on the Shortland
- 40 County Council, I think it was, for damage to his
- 41 computer because of a power surge and got awarded 42 costs.
- 43
- 44 The day the community wakes up and starts suing
- 45 for unreliable power supply and those affected claim
- 46 damages for loss of income and the loss of food in
- 47 supermarkets when you've been blacked out for 24 or
- 48 36 hours, the cost of litigation is going to be
- 49 astronomical.
- 50
- 51 Where our problem came from was when the Wran
- 52 Government came into power it saw an opportunity of
- 53 plundering the reserves of the county councils and
- 54 putting them into consolidated revenue, so that
- 55 money was taken out of the system, where it directly
- 56 belonged, for improving the power facility.
- 57

58 Then the Greiner Government came into power and .19/4/02 32

Transcript produced by ComputerReporters

- 1 they came up with "We want dividends". They 2 demanded dividends and so the revenue that is being 3 earned by the distributing authorities, instead of 4 being ploughed back into upgrading their system, is 5 being paid to the Treasury. That is not well 6 understood. Everybody lies down and has their belly 7 tickled. They are amused by it. 9 We need to come around more to the question of 10 future management. The distribution system, the high voltage distribution system, is now managed by 11 12 Transgrid. Did anyone have a look at the possibility of a commercial investment, funded by 13 14 the superannuation funds, in order to set up an 15 infrastructure program for the complete 16 undergrounding of the power supply? 17 18 One of the sources of revenue could well be 19 18 months away with the provision of broadband 20 facilities coming out of your power point, so that 21 you've got an opportunity for the telecommunications 22 industry getting another competitor. That is a 23 source of revenue and that kind of revenue would be 24 an ongoing revenue and be of interest to 25 superannuation funds. Has there been any discussion 26 in this city about ways of raising funding for this 27 ongoing project? 28 29 THE CHAIRMAN: Thank you. 30 31 MR BEWLEY: Hello, my name is Lex Bewley and I am a resident of Sydney. The issue raised by Mr Viney 32 was interesting because he talked about management -33 34 management of finances, of services and of 35 infrastructure. 36 37 It appears to me that one of these central 38 divides coming out of the costing strategy is who 39 pays, the beneficiaries or the providers. Mr Viney 40 referred to history. Generally, history is that
- 41 people might inherit their farm and as the economy
- 42 changes, if there's a social change, if that farm
- 43 isn't brought up to scratch, if it isn't made ship
- 44 shape again, then their business isn't going to be
- 45 viable.
- 46

53

8

- 47 People are always going to be saying "Tidy it
- 48 up" and their public image isn't going to be so
- good. At the end of the day, no matter the cost 49
- 50 that has to go into fixing up the farm, it doesn't
- 51 allow you to tell the Japanese that we're going to 52 put another \$2 per kilo on their beef.
- 54 I am just wanting to understand as you work
- 55 through a very difficult situation in allocating the
- 56 things about costs, et cetera, et cetera, that the
- 57 philosophy isn't just taken for granted, that user
- 58 pays is the main paradigm we should be operating .19/4/02 33

1 under and forget about the others. History and 1 There are implications for the ecology and for 2 inheritance of that farm still has its ongoing 2 the people of the future that need to be included in 3 obligations to the owner. Thank you. 3 the report and attempts made to estimate the value 4 4 of those and this has been done around the world. 5 THE CHAIRMAN: Thank you. Next? 5 It is a new area and we've got a way to go but it 6 6 certainly has to be included. Thank you. 7 MS PALLIN: I am Nancy Pallin. I represent the 7 8 Ku-ring-gai Bat Conservation Society and although THE CHAIRMAN: Thank you for your comments. 8 9 you probably haven't heard about us, I am going to 9 10 attempt to represent the people of the future. 10 MR MOORE: Peter Moore, a member of the public. I would 11 11 just like to ask the representative for Integral 12 Although we wrote a submission and the 12 Energy how much profit it made last financial year, 13 submission was about the electrocution of flying 13 whether he thinks that the public contributed to 14 foxes, it wasn't just that. In the report it has 14 that profit, how much of that profit was actually 15 been lumped under "amenity" and okay, there is a 15 paid out in dividends to the State Government and 16 minor aspect of it in that you've got these animals 16 why in general don't the energy suppliers, 17 dying on power lines. To me that isn't an amenity 17 authorities, believe that they have to join in the 18 issue and a cost for clearing them off the power 18 technological revolution and why they are still proceeding with power lines on hardwood poles in 19 lines. 19 20 20 this day and age? I would also like to ask him a 21 However, what is far more important is we're 21 personal question, whether he still drives a car 22 talking about a threatened species, a species in 22 with a crank handle sticking out the front and a 23 decline - 30 per cent in decline over the last 23 battery on the running board? 24 decade. It is necessary for the Government to 24 25 produce a recovery plan for them. What is even more MR NEVILLE: I am not sure of the exact figures in terms 25 26 of our commercial performance. Roughly, based on 26 important is the ecological values of these animals. 27 They actually are pollinators and rainforest seed 27 our annual report, I think it is in the vicinity of 28 dispersers. They are very mobile. They are an 28 \$100m profit. As a State owned corporation we pay a 29 integral part of the natural ecosystems of 29 dividend to government, so a large proportion of 30 Eastern Australia. 30 that was returned to government. I think that is 31 31 roughly the number in terms of the dividend. 32 This aspect of an unquantifiable benefit has 32 33 been left out. It should be on page 20. It should 33 MR MOORE: I am trying to get clarification. 34 not just be lumped in with "improved amenity". It 34 MR NEVILLE: I think it is in the vicinity of \$100m. 35 should be a completely separate box called 35 36 "ecological ESD", if you like, or you can call it 36 That is the amount that was paid. 37 37 "ecosystem processes". That is one aspect. 38 38 MR MOORE: Is that the total profit you paid? Was that 39 I am not suggesting that electrocution of 39 your total profit? 40 flying foxes is the only cause of death. We can at 40 41 the moment differentiate the incidence of death or MR NEVILLE: That is the number that I am referring to. 41 42 decline in the population between a number of causes 42 It is in our annual report, which is available to 43 but it is certainly one aspect and should be 43 the public and is on our Internet site, so it is 44 included. 44 very transparent. That is returned to government 45 45 via a dividend. We operate as a State owned 46 Another aspect of all of this is that 46 corporation, which has been discussed. Obviously 47 indigenous trees in many urban areas, which are 47 consumers contribute to that via our pricing. I am 48 remnants of the original forests, are still 48 not sure what more I can add to that question. 49 important in supporting our native wildlife. A 49 50 whole range of birds rely on them. Without those 50 MS CLOVER MOORE: What about EnergyAustralia answering 51 old, indigenous trees we are going to have a black 51 that question? 52 hole in these urban areas as far as wildlife is 52 53 concerned and it is now understood ecologically that 53 MR JAMIESON: I am not too sure again on the figures. 54 we've got to stop this fragmentation because 54 They are published in the Annual Report and freely 55 ultimately there will be a decline in our national 55 available for anyone to look at. We are a State 56 parks because they don't stand alone as islands in 56 owned corporation. As such, we provide money back 57 to our shareholder and the shareholder then decides 57 the sea of suburbia. 58 how to distribute that money for hospitals, schools 58 .19/4/02 34 .19/4/02 35 Transcript produced by ComputerReporters Transcript produced by ComputerReporters

1 or police stations. It is the Government's decision

2 as the shareholder. We provide money back and it is

3 guite public as to how much money we provide back to 4 the shareholder.

5 MR WILLIAMS. Walter Williams, from the Epping City 6 7 Trust. I am a retired engineer. In just looking at 8 the report as such and the terms of reference and as 9 a reader trying to balance out the pros and cons, 10 there seems to be some limitation in the terms of 11 reference, if I may say, particularly in relation to 12 overhead networks scrapping. Under the existing 13 set-up, which has existed for the last 50 years or 14 more, overhead networks in New South Wales have to 15 be maintained in accordance with government 16 regulation. Therefore, it is very difficult to say 17 that any one section of the network will be 18 finishing its life, as I think one of the previous 19 speakers referred to, as an exact situation, because 20 in the case of the overhead networks at any one time 21 if they are not in good condition the service 22 provider is subject to massive penalties. 23 24 This raises a question that, firstly, how do 25 you allocate priorities in the underground program 26 if that is the case? Secondly, in the cost 27 comparison referred to by Mr Chapman and the 28 variables involved, how do you account for the 29 writing off of that massive public asset? A rough 30 guesstimate I would say, the worth of the existing 31 overhead network, is 1 billion at least, and whilst 32 it is desirable for all of us to have a full 33 underground system, nevertheless in the long run the 34 fact is that we are left with that system that has 35 grown and is used throughout the world for its most 36 economic purpose. 37 38 The other point is because overhead networks 39 don't have a finite life, they go on forever so to 40 speak providing maintenance is kept up, underground 41 cables do. A classic case, of course, is the 42 Auckland example of about three years ago when the 43 whole of Auckland was shut down because of cable 44 failure. The life of the cables we are speaking 45 about, particularly the high voltage, the shorter 46 the life. Roughly we are talking about a 40- to 47 50-year implementation program for such a program. 48 That equates with a life of the underground system, 49 so as soon as we finish that period we have to start 50 all over again and if you look at the fundamental 51 engineering aspects, underground systems have to 52 have total replacement; they can't have a unit 53 replacement like with the overhead. Overhead, you 54 can replace a pole or insulator, but the underground 55 system, once the cable's life has had it, it has had

56 it, you have to replace the cable from A to B. And

57 in this case you are talking about the whole of

58 Sydney.

.19/4/02 36

Transcript produced by ComputerReporters

## 1

2 Alternatively, to mitigate those costs, you

3 have to have big upfront initial costs in duct

4 systems that enable ready replacement of the system.

5 The point I am coming to is that in the report, the

6 terms of reference, it only covers benefits. It

does not cover disadvantages. Whilst table 3.1 and 7

8 4.1 I think cover benefits of undergrounding, there

9 should be tables that list disadvantages,

10 particularly this aspect of the finite life of the 11 underground systems matching the implementation period.

12 13

14 MR WILSON: Firstly, thank you for your comments. You 15 made several points. I am not quite sure how to 16 respond other than to say that all assets do have 17 some finite life or other and whatever view might be taken of that, there will be an accompanying program 18 19 of refurbishment or replacement in whatever form is most economic associated with the existing network. 20 My point really is that if the existing network is 21 22 to be replaced by another network that fulfils the 23 same purpose but happens to be underground then 24 account needs to be taken of the projected program of expenditures for either refurbishment or 25 26 replacement of the existing network and that was 27 what we attempted to do in forming a profile of 28 replacements.

29

30 MR CHAPMAN: I suppose we tried to bring up the issue of

31 avoided costs in all of this. I think you have

32 touched on this question of how hard it is to talk

about what costs you precisely do avoid when you 33

replace one system with another. The fact that an 34

35 existing network has to be maintained in safe

condition indefinitely suggests that there will be 36

37 maintenance costs of one kind or another attached to

that life profile of the existing network. If you 38

put a system underground, depending on the way and 39

40 the phasing of that activity, you will avoid some

41 replacement cost; to the extent that there is

genuine replacement of the existing system, you will 42

43 avoid some maintenance cost. On the other hand, you

will confront yourself with other maintenance costs. 44

45 I think that is the point you are making.

46

47 The difficult task is netting those things out

so that you know what the true net costs of an 48

underground system are going to be, the true 49

incremental costs of an underground system. To try 50

51 to get a precise fix on what those avoided costs of

52 going ahead are, maintaining the existing network,

53 that is quite a challenge. Jeffrey has mentioned

54 that that could be under some assumptions as much as

55 50 per cent of the costs of a new optimised network. 56 Under other assumptions it might be a lot lower than

57 that if you have to actually scrap a lot of existing

58 equipment before its economic life has expired, then

.19/4/02 37

- 1 the true costs you face of the undergrounding system
- 2 are higher than they would otherwise have been. But
- 3 if, indeed, you are avoiding all of these
- 4 replacement costs that brings down the true net
- 5 cost.
- 6
- 7 We don't have enough information at this stage
- 8 to put a pinpoint number on that net incremental
- 9 cost of the system. But your points are well taken,
- 10 those are precisely the kinds of things that would
- 11 have to be drafted into a fully designed and costed
- 12 project.
- 13
- MR DOWNEY: A couple of things. I don't know how much 14
- 15 you know about this report but if you check through
- 16 it you will find that on historical data that was
- 17 provided by a number of people such as Integral,
- 18 EnergyAustralia, Mercury and so forth, that
- 19 historically underground systems are five times more
- 20 reliable than above and they cost half as much as to
- 21 maintain. That is on historical data in the report.
- 22 There are a lot of people who would say that is
- 23 conservative.
- 24
- 25 If I can just go back to what was being said
- 26 about profits that both these organisations, EA and
- 27 Integral, make, at the end of the day we have to
- 28 realise that one way or another we, as taxpayers, as
- 29 shareholders through the government or whatever, are
- 30 going to have to pay for this. If you are going to
- 31 go taking money out of the profits of EA or Integral
- 32 to pay for it, that is money that is not going to
- 33 the Government, which is money that is not going 34 into schools.
- 35
- 36 I know you are probably sick and tired of
- 37 hearing this, but that is money not going into
- 38 schools or law and order or it is not going into
- 39 health. My organisation right from the very
- 40 beginning said, that is not on, it has to be done
- 41 via a levy but that levy has to be affordable and it
- 42 has to have social equity as we spoke about earlier.
- 43 If somebody would like to go into that a bit 44 further, well, we will talk about it then.
- 45
- 46 MR WILLIAMS: In reply to those comments, the question of
- 47 reliability of underground systems versus overhead
- 48 is such a wide one, you definitely cannot rely on
- 49 historical data. Firstly, there are technological
- 50 developments, then you have the matter of finite
- 51 lives of underground cables. That is an engineering
- 52 fact that cannot be denied.
- 53
- 54 I refer you to the classic case in Auckland
- 55 three years ago where the whole system was shut
- 56 down. The other point is that the overall
- 57 assessment of cost, surely as I think one of the
- 58 previous speakers said, must be the subject of a
- .19/4/02 38
  - Transcript produced by ComputerReporters

- 1 major trial with, firstly, the type of design of 2 system which can alter the initial capital cost by 3 an order of magnitude. Until we get a firm design 4 that is acceptable to everybody that will be the way 5 we go, the cost factors will be way out. There can 6 be many orders of difference. MR DOWNEY: First of all, the Auckland failure was a very high voltage cable, not low voltage such as we 10 are talking about. You mentioned that things are changing and you cannot rely on historical data. I 12 totally agree, but this does say the reliability factor is one to five and with modern technology you 13 would expect that to increase in favour of 15 undergrounding, not decrease. 16 MR WILSON: On the question of reliability, an important 18 point to note is that all DNSPs are greatly 19 improving the reliability and performance of their existing overhead networks at present and the improvements are significant. They are coming, 22 firstly, through the reduced cost of automation and 23 the increased application of automation on the 24 networks and they are coming also through different management policies for the control of planned work 25
- 26 on the networks and you will find in many companies
- 27 very significant reductions in the minutes lost on
- systems from shutdowns to less than 100, getting 28
- 29 down to 50 or 60 minutes, and in considering
- 30 therefore the benefits of an underground system over
- 31 an overhead one those margins are reducing. 32
- 33 MS CLOVER MOORE: Clover Moore, member for Bligh. I
- would just look to say that I am really disappointed 34
- 35 this morning that we seem to be talking about
- whether it is a good idea to underground cables 36
- 37 rather than how it is going to be done because when
- 38 I raised this in parliament as a matter of public
- 39 importance that cabling be undergrounded in New
- 40 South Wales, I got bipartisan support from all
- political parties. The Minister spoke in that 41
- debate and the Premier made a public statement that 42
- day that he was asking Minister Yeadon to produce an 43
- 44 implementable plan by June and here we are in April
- talking about "whether" rather than "how". 45
- 46

7

8

9

11

14

17

20

21

- 47 That debate in parliament and unanimous support
- came hot on the heels of unanimous bipartisan 48
- support from the Local Government Association 49
- 50 representing communities right across New South
- 51 Wales and I would just like to say that whilst my
- 52 electorate is an inner city electorate, I have had
- 53 feedback again from across New South Wales that
- 54 communities are sick of their environments being
- 55 ravaged by the distributors and there is incredibly
- 56 strong support out there in the community and I am
- 57 just really disappointed that in April you are not
- 58 presenting to us a draft plan about how this is to .19/4/02 39
  - Transcript produced by ComputerReporters

1 be done as the Premier requested Minister Yeadon to 2 do. I think that you really better get a hurry on 3 since you have only a couple of months to do it. 4 5 MR DOUGLAS: My name is Bryan Douglas. I represent the 6 Australian Electrical and Electronic Manufacturers 7 Association. We represent the electrical capital 8 equipment industry and the lighting industry through 9 lighting councils. I would certainly like to 10 support the comments that Warren Taylor made about 11 lighting. I would also like to add that we feel 12 that the costs for street lighting have been 13 overestimated in the report and we'll be working to 14 refine those costs and we'll be giving you further 15 information on those. 16 17 THE CHAIRMAN: Thank you. 18 19 MR DOUGLAS: The other comment I would like to make 20 about lighting in Sydney is that it's characterised 21 by a lot of very old fashioned, energy inefficient 22 lighting and the opportunity to replace that with 23 much more energy efficient luminaires will have 24 significant benefits for energy savings and 25 greenhouse gas emissions savings. 26 27 THE CHAIRMAN: Thank you. 28 29 MS McLEAN: My name is Lyn McLean and I am from the EMR 30 Association of Australia. I would like to say, 31 first of all, that the association is supportive of 32 the concept of undergrounding cables but what we 33 would like to see reflected in the report is 34 something that hasn't been even considered in this 35 report and that is electromagnetic radiation and its 36 potential health effects. 37 38 I know that IPART has received quite a number 39 of submissions about that and that is a very 40 important issue for the community because there's a 41 great deal of information coming out about the 42 health implications of this radiation at the moment. 43 44 The reference to it in the main report is on 45 page 27. It consists of two paragraphs and it does 46 not deal with the issue of concerns about health 47 impacts and I think that that's a little bit 48 unfortunate. I would like to ask that that be 49 rectified. 50 51 Certainly there are ways of undergrounding 52 these cables without increasing the amount of 53 radiation that people are exposed to. We would like 54 to see that implemented and that sort of thing being 55 considered at the design stage. I think that it's 56 terribly important to be looking at this now because 57 if we're talking about costing it, how can we be 58 costing it if we don't know what we're designing .19/4/02 40

Transcript produced by ComputerReporters

1 for? Could I ask that that situation be considered 2 as a matter of urgency. Thank you. 3 THE CHAIRMAN: Thank you. Is there another comment or 4 5 question? 6 MS ROLFE: My name is Hilda Rolfe. I did have a past in 7 8 the electricity industry but it seems a long time 9 ago; I am a private citizen now. I want to comment 10 on the component of your report that talks about the change in risk to electrical workers from 11 12 undergrounding. In that rather deadly past of mine 13 I was chairman of a board safety committee. One of 14 the things I think I learnt was that it's desirable 15 to minimise the incidence of exposure to what I 16 could only call a deadly force. Electricity is 17 deadly; electrocution is death. 18 19 The attitude that I read in the draft report is 20 rather regrettable I think because it just says the 21 potential change is probably minimal, given they 22 receive extensive electrical safety training and 23 where cables are located injuries should be 24 minimised. Just because people are trained doesn't 25 excuse you from the obligation to ensure minimum 26 exposure. 27 28 I would really appreciate it if the Tribunal 29 and those who advise it would look at that section 30 of the drafting very carefully and perhaps in the 31 final report give due weight to this issue, which is 32 very important I think for employees, those people 33 who get out in the storms and do incredible things with a deadly force. 34 35 THE CHAIRMAN: Thank you for your comment. 36 37 38 MR DUNSTAN: My name is Ron Dunstan and I am from the 39 Epping Civic Trust. I would like to support what 40 Peter Downey said in his presentation. What we're 41 really talking about is a sort of mission and vision 42 statement and it is something that we should be 43 doing something about immediately. As Peter said, 44 in New York, Paris and London they saw fit to see 45 out this work well over 100 years ago, in the late 46 1800s. 47 48 I think really if Sydney wants to maintain its 49 sort of upmarket vision or upmarket situation as a 50 First World type of city - after all, we've had the 51 Olympics and we're doing all sorts of other big 52 things - we have to get with it because there are 53 many, many parts of Sydney, I think you'd agree, 54 that are incredibly ugly and a lot of this ugliness 55 is caused by power poles and wires. 56 57 For instance, if I drive from my place to the 58 National Park near Sutherland I would probably go .19/4/02 41

1 through five different council areas. They all do MR JANTHES: Bill Janthes, Sydney Cables Down Under, 1 2 everything a different way. There is no such thing 2 Manly-Warringah. Over the past 30 years I've been 3 as uniformity; they have different street signs, 3 entertained, disappointed and horrified at the 4 different roundabouts, everything is different. 4 vacillation and the lack of political, community and 5 commercial will to get this job done. 5 6 I agree with Peter that there should be no such 6 7 thing as an area opting out. We have to realise 8 that we are talking about a statewide and a citywide 9 concept. If I can drive through another suburb and 10 see that they've achieved beautification, that 11 they've got nice trees in the street and they've got 12 some kind of uniformity in their streetscapes, I'm 13 just as happy as if it's happening in my own street. 13 additional cables to use later. 14 14 15 I would like to support what Peter said and I'd 16 ask you all to consider looking at this project as a 17 statewide and citywide project that will really 18 benefit everybody. Thank you. 18 19 done. 19 20 20 THE CHAIRMAN: Thank you. 21 22 MR ZANOTTO: My name is James Zanotto and I'm from the 23 office of Clover Moore. If we were talking about a 24 product like a computer or a mobile phone, a 25 technologically better product would be coming on 26 the market fairly quickly and consumers would be 27 driving it to happen, but because we're talking 27 28 about a technologically better product for putting 28 29 cables underground, you can't have both products on 29 computer at one time. 30 the market at the same time. Someone is not going 30 31 to look out their window and say, "Well, it's 32 costing me less to have it underground but I've 32 33 still got the cables above ground. Therefore, I'm 34 going underground". 35 35 36 I think ultimately one of the drivers in this 37 is that energy is a naturally monopolistic market 37 38 and at the moment it is heavily regulated by 38 39 government and at the moment the direction of the 40 Premier is that an implementable program be put in 40 41 place. The policy is that the regulation is to 41 42 shift and what we actually need now is the effort 43 going into how to achieve that and I am not hearing 44 that today. 45 46 I think we need to have a look at how many of 47 the institutional people who benefit from the 47 48 current system are holding on to the barriers. I am 48 49 particularly concerned that the LGSA and Sydney 49 50 Cables Down Under, which are the voices calling for 50 51 something different to our current system, are not 51 they'll go next time as well. 52 being incorporated centrally into the process and 52 53 instead all of the institutional corporate players, 54 who have a vested interest in keeping things how 55 they are, are the ones controlling the process. 56 THE CHAIRMAN: There is a comment over here, I think. 57 58 instance, that Ross Chapman's measure took full 58 .19/4/02 42 .19/4/02 43 Transcript produced by ComputerReporters

7 We are going to have to do it. We are going to 8 have to make a start, so let's do it now. I have 9 been affected in almost every way that we've talked 10 about here. When I arrived in Fairlight they'd just 11 put the power underground - it was Mackellar County 12 Council - and promises were made to underground 15 One of my neighbours hit the very first pole 16 that wasn't underground when he passed that point. 17 He badly damaged his leg and his car. That is why you don't opt out of a system like this; you get it 21 I live in a different place now where we were 22 promised to have cables undergrounded by the 23 Bicentennial in 1988. It wasn't done. Two of those 24 poles collapsed right out in front of my place. 25 They are right in front of the ocean. The power 26 should have been undergrounded but it wasn't. Every three weeks we have a power interruption. I have lost a refrigerator, I've lost food and I've lost a 31 The work has to be done. We need to do it. Specifically, we're talking about economies of scale 33 here. When you take into account the fact that we 34 may want to do those areas where the infrastructure has broken down and things need to be updated, 36 there's a problem here in that if you start moving

- your equipment around every time there's an old bit
- that has to be replaced, you're going to spend a lot
- 39 of money moving your horizontal borers and all of
- your equipment and your people around to do the job.
- 42 We need to do it in a way that impacts on
- 43 safety first and then look at other areas.
- 44 Certainly, it needs to be done in a structured way
- 45 that doesn't waste money. We talk about replacing
- 46 things at the end of their life, which is a good
- idea certainly and I agree with it generally.
- However, if you have an area that's ravaged by
- bushfire, naturally they put up poles and they put
- up lines on a regular basis; those items are new and
- 53 You have to use an intelligent way of looking
- 54 at things. You can't necessarily just follow a
- 55 given rule. Certainly, to reinforce the point that
- 56 the beneficiaries include impactors, this is largely
- 57 because of maintenance savings. I don't think, for

1 account of the cost of mutilating the trees. I

2 imagine that it's going to cost a lot more to trim

 $3\;$  those trees or cut them down or take them back to

 $4\;$  stumps, as the case may be.

5

6 When we're talking about maintenance we also

7 need to think about motor vehicle accidents, their

8 cost and their impact on our insurance premiums.

- 9 Certainly the insurance companies do pay out. Going
- 10 back to what Peter said earlier, it certainly is

11 difficult to quantify the benefits because it has

- 12 been impossible in many instances to quantify the
- 13 costs. Insurance companies have just not kept tabs 14 on the amount of spoiled food that has to be thrown
- 15 out from supermarkets, for instance.
- 16

17 I am talking about a small amount of money.

- 18 They haven't kept account of lost production costs,
- 19 wages and probably lost markets from time to time.
- 20 I think all of these things have to be taken into
- 21 account, but let's start the ball rolling and begin
- 22 to put in the cables. That is what we need to do.
- 23 Thank you.
- 24
- 25 THE CHAIRMAN: Thank you. There is another question26 down the front.
- 27
- 28 MS IRVINE: Rebecca Irvine from AGL. This question is
- 29 directed to Peter Downey. Peter, it sounded like
- $30\;$  you weren't really pro the funding that is suggested
- $31\,$  in the report. I was just wondering what sort of
- $32\;$  funding mechanism you would like to see for this
- 33 sort of project?

34

- 35 MR DOWNEY: When we sat down initially what we did was
- 36 we looked at funding. We didn't look at the cost,
- $37\;$  we looked at funding and then we tried to work
- 38 backwards from there. The sort of thing that we
- 39 came up with is that it doesn't matter if you live
- 40 in an area that has already been undergrounded. You
- 41 are going to be affected on a road safety basis.
- 42
- 43 If you take my area for example, Pennant Hills,
- 44 the next suburb to that is Cherrybrook. Cherrybrook
- 45 is already underground but every day people have to
- 46 leave Cherrybrook to go to school, to go to work, to
- 47 go to the shops, to go to see a show, or whatever
- 48 else they do, and they drive through Pennant Hills,
- 49 they drive through Beecroft or Normanhurst or
- 50 Hornsby and so there's a road safety aspect there
- 51 that they should be asked to contribute to.52
- 53 We would really like to sit down and talk this
- 54 through but before we can we need data. We don't
- 55 have that data. We need information from the
- 56 Ministry, from our friends from Energy Australia and
- 57 Integral Energy and we need information from the
- 58 RTA.

.19/4/02 44

Transcript produced by ComputerReporters

1

2 I would propose that without that information,

- 3~ let's just say that we put the equivalent of \$20 per
- 4 electricity consumer on to motor vehicle
- $5\;$  registrations to cover the road safety aspect.
- 6

7 On the consumer side, if you're in an area 8 which has overhead power, as I said earlier, we're

- 9 really talking peanuts when you look at the costs
- 10 and extrapolate that over 40 years and then you work
- 11 that backwards to a small cost per week which would
- 12 go on to your electricity account.
- 13
- 14 That is as far as we've taken it. We would
- 15 like to take it the next step and the next step is
- 16 that nobody has really defined a benefit at this
- 17 stage. When we say the beneficiary pays, I would
- 18 like to propose that the benefit is also about
- 19 reliability and the more electricity you use the
- 20 greater the benefit you're going to get from
- 21 reliability.

22

- 23 Why not have it on a sliding scale so that
- 24 pensioners and those who are hard up against it and
- 25 would normally use theirs fairly frugally, they'd
- $26\;$  use a small amount of electricity, so they pay a
- 27 small amount. A business may have to put off their
- $\mathbf{28}\;$  workers for a week because they have no power and
- 29 that happened in Hornsby in November and December,
- 30 when it has been estimated 3,000 people were thrown
- 31 out of work for up to a week.32
- 33 I notice that didn't get in the press but
- 34 that's actually what happened. They're not my
- 35 figures. They are figures that are coming to me
- 36 from aldermen and various other sources and small
- 37 businessmen and so forth, so they pay a little bit
- 38 more. 39

48

49

50

51

52

53

47 reasonable?

.19/4/02 45

- 40 If that creates big distortions, you can also
- 41 put a cap on the bottom to protect the pensioner and
- 42 the person who is hard up and you can put a cap on
- 43 the top so that perhaps the business doesn't pay an

MR WELLSMORE: I would just like to turn around this

perception about geographical inequity, "my suburb,

we have street poles and that is unfair because the

contemplated the idea you might want to say there

mob next door don't". As I said at the outset, we

54 are some areas, the peninsula might be one area,

55 that have significant issues because of physical

57 have particular problems and they ought to be

Transcript produced by ComputerReporters

56 environment and historical decisions that perhaps

58 addressed in some holistic way and let's find a pot

- 44 exorbitant amount. That is the vision I have and I
- 45 would like to pass it over to you. I don't know
- 46 what you think. You tell us. Does that sound

1 of money which tries to get reliability and so forth 1 disagree with any of it. 2 for those people in those areas roughly comparable 2 3 with other areas of the urban areas of the state. MR BLEAZARD: Greg Bleazard, I am a concerned resident 3 4 4 of Sydney. I would just like to start off by saying 5 That is fine, but the issue then is, how do we 6 pay for that and the two main goers in this debate 7 seem to be, well, let's just slap everybody with a 8 charge on their bill somehow, we will take it out of 9 the consumers that way, or just slap the cost onto 10 the distributors or government or just take it out 11 of everyone's pocket that way, because at the end of 12 the day it is the same thing, it is money not being 12 13 spent on other things. 13 14 15 It is fine to talk about the invalid pensioner 16 and the small flat out in the Western suburbs not 17 using much electricity, but the no income family 17 18 with quite a high electricity consumption, what are 18 19 you going to do about those people, how do you build 19 20 in social equity in those kinds of situations? I 20 21 find it a pretty sort of defying approach but, be 21 22 that as it may, if we talk about geographical 23 inequity let's talk seriously about it and look at 24 the mapping that has been done about equity in New 25 South Wales and other places. The data is there and 25 26 the mapping has been done. 26 27 27 28 If you look at maps of New South Wales or the 29 Sydney metropolitan area, employment, transport, 29 30 education, health services, where are they all 30 31 cluttered and concentrated? They are on one side. 31 32 You can draw a line around the post codes and you 32 33 can say these people have got different outcomes to 33 34 these people. Yet the proposal that seems to be 34 35 coming up about undergrounding says, well, the 35 36 people out where they have less of all those things, 36 37 their priority will still be undergrounding, they 37 38 will value undergrounding ahead of perhaps the old 38 39 age pensioner who actually puts a premium on 40 mobility and hence public transport or mobility and 41 perhaps even their own personal safety in terms of 42 money being spent on footpaths, let say. 43 44 It is a pretty tricky debate I submit to you 44 45 all and it seems to me that if we are going to talk 45 46 about equity in that way, you have to weigh up 47 exactly what it is you are trying to offer to people 47 48 and you have to make that choice, as we said at the 48 49 outset, that every dollar spent on undergrounding is 49 50 \$1 less you have to spend somewhere else. They are 51 the choices that we have to make. 52 52 53 MS CLOVER MOORE: My constituents in Redfern don't like 54 their neighbourhood being ravaged either and they 55 are not on very high incomes. 55 56 56 57 matter that Minister Yeadon has asked IPART to look 57 MR DOWNEY: I don't disagree. We have to sit down and 58 work our way through the equity issue. I don't 58 at are three issues, the costs, the benefits and .19/4/02 46 .19/4/02 47 Transcript produced by ComputerReporters

5 the thing that concerns me about what I am hearing 6 this morning is not when are we going to do this and 7 how, it is, will we do it, and the impression I am 8 getting from the people sitting up the front, 9 forgive my political cynicism, we are looking for 10 excuses not to do it. As Peter Downey says, if 11 Premier Carr won't do it, maybe Premier Brogden will. It has to be done in the future. 14 I had the pleasure last week of being in 15 Raratonga in the Cook Islands way out in the 16 Pacific. One of the pleasure of Raratonga is their cables are underground. They are a developing country and they have already put their cables underground. A couple of years ago I was in Cairo, arcs sit I, a city of 21 million people, a third world country, and their cables are underground. I 22 went to Harare, which we all know is going through 23 political turmoil, a backward third world country, 24 and their cabling is underground. I wonder if they went through all this to get their cables underground? This is the thing that worries me. 28 Another thing that worries me is the lack of vision that is being shown. I am old enough to remember when Sydney didn't have sewerage on. We all used the sewerage system sometime today. We have come to accept the fact that we can do what we want to do, press the button or pull the chain, and off it goes. Think back to the days when you sat on the can and the sani-man came around once a week. We had a system in place, it was working, but we improved it with a situation that has come now to be recognised as the norm. What we are talking about 39 here in 40 years time, in 20 years time, will be the 40 norm. It is the norm that is accepted as the norm 41 in most of the Western world, so what I am saying in 42 conclusion is, let's cut the crap and get on with 43 doing it. Thank you. MR STEFFEN: Brian Steffen, Acting Director-General of 46 the Ministry of Energy and Utilities. There are a few things we have to clear up about what Minister Yeadon's responsibilities are. As Clover said, the Premier did ask Minister Yeadon to investigate 50 undergrounding for electricity cables in the greater 51 Sydney basin. 53 MS CLOVER MOORE: To come up with an implementable plan. 54 It is embedded in my mind. MR STEFFEN: And mine too. It is a big project. The

1 funding options. Funding options are critical. The

2 Minister is very keen to come up with an equitable

4

- 3 funding option. 5 The reason these three issues were put to IPART 6 is that it is independent, it can conduct an 7 independent consultation, and that is evidenced by 8 today, with everyone having their say and everyone 9 listening. What I need to do for Minister Yeadon 10 and what he need to do for the Premier is canvass 11 all the views, all the issues that are being 12 discussed today and in written submissions, and 13 incorporate that in a report to the Premier or to 14 the cabinet. I hope I have cleared that up. 15 16 I am happy to take any questions on this but 17 the specific terms of reference for IPART was the 18 cost, benefits and funding. That is why you are not 19 hearing an implementable plan today. I don't think 20 there is an argument about whether or not to do it 21 in this, it is the cost and benefits and the funding 22 options that need to be discussed today, and 23 everyone is to be heard. There are lots of 24 submissions on the IPART website, I have read all of 25 those and so have my staff, so thank you. 26 27 MR VINEY: You wanted the job, someone has to make a 28 quid out of it, that is what has improved our 29 telecommunications, that is why Optus got in the 30 business, they could make some money out of it. Why 31 don't you go to the people in the city just like 32 Macquarie Investments have done with their trusts, 33 they have seen the opportunity of making money for 34 investors by providing for public utilities. 35 36 I am sorry, I believe that as far as entering, 37 any of your distributors are concerned, they are 38 overwhelmed by the fact they have to dance the 39 Treasury tune, that whatever money they make 40 Treasury will have an influence as to whether it is 41 paid a dividend or can be used for the benefit of 42 the community. Therefore, if you look at the 43 guestion of an infrastructure company that will take 44 over the cables, it will have shares in it, so give 45 it to someone else whose sole business is to develop 46 that infrastructure and make money out of it. 47 48 I indicated earlier that the reports are that 49 we are on the verge of having broadband facility 50 coming out of power lines. That is a source of 51 revenue which could interest someone like Macquarie 52 Bank and if you don't talk to them, you won't know. 53 54 MR PUIE: A comment please - Dominic Puiu, manager for a 55 non-profit association called Dial before you Dig. 56 Our 30 members are very well represented here today. 57 Our members for the most part own, operate or manage 58 underground pipes and cables. Many of our members .19/4/02 48
  - Transcript produced by ComputerReporters

1 also have above ground assets and are therefore 2 interested in this argument from both points of 3 view.

4 5 I would just like to say, please, that from the 6 public debate that I have seen up until now in terms 7 of the eventual development of an implementable 8 plan, I think the costs involved in actually placing 9 the electricity cables underground from the point of 10 view of minimising or avoiding damage to existing pipes and cables under footpaths and roads has been 11 12 greatly understated. In my line of business we see 13 damages every day - and again this is not to throw 14 any spanners in the works, I think it is a very 15 noble idea and I agree that data is a very important 16 part of the process of coming up with an 17 implementable plan - I just believe, though, that the risks are twofold if the dangers to the existing 18 network are not taken into account. 19 20 21 The first one is that the cost for putting 22 cable underground will be greatly understated 23 because there are costs involved in pole holing and 24 locating and making safe existing assets when you 25 are putting cables underground and, secondly, if 26 that is not done the potential costs and loss of 27 business through loss of supply through a cut to 28 electricity cable or optical cable can run into many millions of dollars. We have had instances in New 29 South Wales in the last year or two where cuts to 30 31 sunk optic fibre cables has led to business losses 32 in the order of many millions of dollars. I just 33 add that to the debate. 34 35 MR FENSON: Glen Fenson, from Ku-ring-gai Council. Has 36 the issue of carbon credits been considered as part 37 of this in terms of if we do go underground we can 38 have obtain 10 per cent more of street sites for 39 more substantial tree planting, which would have an 40 impact on carbon uptake and, considering the energy 41 industry has a role to play in carbon emission, has 42 that been considered as part of the process? 43 Secondly, a comment to David, the cost of 44 airconditioning, the cost of energy in Western 45 Sydney, work is being done up in Brisbane on the

- 46 positive effect on vegetation from airconditioning 47 reductions. Has that been considered as well?

48

- 49 MS VISSEL: Frances Vissel, a Councillor with Lane Cove.
- 50 First of all, I would like to complement Peter
- 51 Downey on his presentation. Many of us support his
- 52 views. However, I was listening today to the talk
- about the beneficiaries. I would just like to say 53
- that I don't think it is just the consumer who is 54
- 55 the beneficiary. It is quite obvious that the
- 56 providers are also great beneficiaries. If we are
- 57 talking about costs, they have to be shared in my
- 58 opinion, not just the user pays and the community. .19/4/02 49

1 committee all the issues of that organisation and 1 That is very important. 2 the various technical reports. 2 3 Secondly, I would like to pick up on Warren 3 4 Taylor's presentation about the LGSA and local MR BLEAZARD: He needs to be on it. That has to go back 4 5 government has not been represented on the steering 5 to the Minister. 6 committee. I think that is something that should be 6 7 rectified. After all, local government is a very THE CHAIRMAN: I am sure the point has been made. 7 8 important factor in this instance. Thank you. 8 9 MS MOORE: And also the LGSA. 9 MR DOWNEY: Can I answer that. In my presentation I 10 10 11 said that what I would like to see on the MR McNALLY: My name is Ray McNally. I am from 11 12 electricity account is how much it is going to cost. Integral Energy and as David was saying at the 12 13 What I meant by how much it is going to cost is the start, contrary to perhaps what most people think, 13 14 levy I have to pay, then a second line showing the we are not opposed to the projects that are being 14 15 cost saving, and I would expect that that cost put forward. In fact, we're generally the ones who 16 saving would then come off my electricity account. 16 are out late at night in the storms trying to fix 17 17 lines. 18 On the issue of carbon credits, again I would 18 19 like to go back to this report I referred to 19 It obviously boils down to where do we find the 20 earlier. They made some very bad assumptions in 20 money and how do we fund it, et cetera, et cetera. 21 here, nonetheless they give a figure of \$240 per 21 Have backhoe will travel. There are a couple of 22 kilometre of line per year saving. That goes all 22 points that I feel obliged that I should comment on. 23 the way back to the power station. That is power 23 It was mentioned a couple of times that the overhead 24 you don't have to generate, that is greenhouse 24 network is getting older and it's going to be 25 gases, whatever, up the smoke stack that have to be 25 replaced anyway. 26 accounted for. So you have a saving there. 26 27 27 I know that a couple of people have commented 28 Secondly, as somebody else did mention, you do 28 on that but I think that it should be clearly understood that the overhead network is like 29 get also a saving because you are putting carbon 29 30 sinks in, rather than planting trees and not grandfather's axe. It isn't like the car that's 30 31 allowing them to grow to full height instead of 31 getting old and takes a bit of maintenance but at 32 mutilating them around power lines. 32 some time you have to replace it. 33 33 34 MR BLEAZARD: A simple question of the Chairman. 34 In that way you can compare undergrounding to a 35 Mr Downey over there seems to have all the answers. 35 car: some day you've got to replace it. All of our 36 Why isn't he on the steering committee? earlier underground areas in the new subdivisions 36 37 37 have been underground since about 1969. With some 38 MR COX: I do want to clarify one point. We represent of those earlier ones, for instance, at Kings 38 39 IPART. IPART has been asked to do a specific task, 39 Langley, we're back out there now and having to 40 which is to report. We are here representing IPART. 40 replace those. That is an expensive exercise. 41 IPART has been given a specific responsibility in 41 42 this process, which is to report on costs, benefits 42 We are talking about grandfather's axe. We 43 and funding options. That is all that we are going 43 change a pole here and an insulator there and it is 44 to do. We will listen to what has been said today, 44 really just ongoing maintenance and those 45 finalise our report, and present the report to the 45 maintenance costs are those that are being factored 46 Minister for Energy. What happens after that is his 46 into the calculations of avoided maintenance, so 47 responsibility but it is not something that we can 47 they're already counted in. If we count wholesale 48 discuss today. I am sure that the points you are 48 replacement we would be double-counting, in general 49 making have been noted. 49 terms, in most cases. 50 50 MS CLOVER MOORE: Can I just take that a bit further and 51 51 There is a second point I would just like to 52 ask that you take back to Mr Yeadon a specific 52 comment on. I think we're all going away with the 53 request that Peter Downey go on the committee and 53 concept in our minds that the costs are somewhere 54 the LGSA also go on the committee? between \$1,800 and \$3,000 a block - out of the 54 55 Meritec report - but you must read after those costs 55 MR STEFFEN: We will certainly take that back. Peter 56 56 that it is net present value. The net present value 57 has been extremely helpful to the industry and Peter 57 is an actuarial treatment which is used to compare 58 Woods from the LGSA has presented to the steering 58 options - say two or three options - and you're .19/4/02 50 .19/4/02 51 Transcript produced by ComputerReporters Transcript produced by ComputerReporters

1 trench. You then have to reinstate it and the 1 wanting to see which one is the cheaper. 2 reinstatement cost is higher than the cost of 2 3 For example, if you have a program that is 3 boring. 4 going to cost \$1m per year for 40 years, the net 4 5 present value is not \$40m, it's about \$17m or \$18m 5 The technology is galloping ahead at a 6 because it's discounted back. It is more or less 6 tremendous pace at the moment. It costs very little 7 the amount of money you need now to put aside, to 7 extra to go through rock these days than it does to 8 invest, to pay for your program as you go. 8 go through clay and it's easier to go through clay 9 than it is to go through sand, believe it or not, 9 10 We have been coming up with numbers like \$5,000 10 because sand has a tendency to collapse and you've 11 or \$7,000, which is a lot. If we want to go out 11 got to put expensive additives in to prevent it 12 tomorrow and do a thousand lots it's going to cost 12 collapsing. If it does collapse you cut the bore 13 us \$7m, so that we're talking about, more or less, 13 right off and then you have to start again and that 14 can be very expensive. Does that answer your 14 the real cost of doing a job. I think what did 15 happen in the report is that there was a comparison 15 question? 16 made between \$1,800 to \$3,000 and prices quoted by 16 17 electricity distributors of \$5,000 or \$7,000. Those 17 MS VISSEL: It wasn't a question. I was actually making 18 numbers are different, they are apples and oranges 18 a statement that long term advances in technology 19 and can't be compared, so that has to be borne in 19 are going to bring costs down. That was what I was 20 mind 20 trying to say. 21 21 22 MR DOWNEY: Could I also take this up to the gentleman, 22 What we're about is getting down and 23 establishing what the real costs are and then, if we 23 Dominic, from Dial Before You Dig? Along with this 24 can come up with a funding arrangement, we'll start 24 equipment what normally happens is as one guy is 25 our backhoe and off we'll go. Thank you. 25 setting up his machine, you've got another guy who 26 goes down with a laptop and a hand held ground 26 27 THE CHAIRMAN: Thank you. 27 piercing radar and he can plot where all the 28 28 obstacles are and put that into the laptop. 29 MS MOORE: We would never have built the Harbour Bridge 29 30 if this had been the attitude. 30 When he's finished he then goes back and gives 31 31 it to the operator or the driver of the machine. 32 MS VISSEL: I just want to make a comment on you taking 32 They are directional, you can steer the thing 33 out the backhoe. Some years ago to build a road underground, but when he gives that to the driver he 33 34 tunnel, or any tunnel, you'd use drilling equipment; 34 puts down his ground piercing radar and he picks up 35 nowadays you'd use boring equipment. I am just 35 a sonar device and he walks his way along tracking 36 wondering how much the costs might actually reduce 36 the cutting head. 37 37 over a period of years with technological advances 38 in boring equipment and cable laying. 38 The technology is advancing at a tremendous 39 39 rate and it is possible to go around all those 40 MS MOORE: Given the tollway is going up. 40 obstructions that we talked about earlier, which a 41 backhoe can't do. 41 MR DOWNEY: Mr Chairman, I believe I can answer that. 42 42 43 From figures that I've received - am I allowed to MR McNALLY: Could I make a further comment on that? I 43 44 mention names here? 44 apologise for using a backhoe as an example. I have 45 45 paid that price. I have also been the Chairman of 46 THE CHAIRMAN: It depends upon what is involved. 46 the New South Wales Street Opening Conference that 47 47 manages policies associated with opening streets and 48 MR DOWNEY: Might I refer to the names of equipment 48 we would certainly be looking very closely at 49 manufacturers? 49 directional boring technology. 50 50 51 THE CHAIRMAN: I don't see why not. 51 Please bear in mind that in this exercise we 52 52 most certainly would be looking at joint MR DOWNEY: The figures I have received have come from 53 undergrounding, so that you're not just talking 53 54 Vermere. Vermere make trench diggers. They also 54 about a trench or a duct or an electricity cable, 55 you're looking at Optus and Telstra as well and then 55 make horizontal boring equipment. If you're going 56 to trench it costs you \$20 a metre, if you're going 56 the services at every second lot. 57 to bore it costs you around \$40 a metre, but the \$20 57 58 a metre to trench is only the cost of digging the 58 Directional boring has quite some inherent .19/4/02 52 .19/4/02 53

Transcript produced by ComputerReporters

1 difficulties in its applications for a project like 1 2 this. We would certainly use it and recommend it 3 where possible, but it's not a panacea on a project 4 like this. 4 5 5 MR DOWNEY: Why are they using it in Western Australia 6 7 then? 8 MS MOORE: We are looking for solutions. 9 10 MR WILLIAMS: Could I make a final comment on 11 11 12 reliability, Mr Chairman? Unless there is some 12 13 transmission system undergrounded as well, there'll 13 14 be no effect on the liabilities statistics for major 15 outages. 16 17 THE CHAIRMAN: Thank you. Is there another comment? 17 18 18 19 MR DOWNEY: Could we have a reply on that, perhaps from 19 20 Meritec? 21 MR WILSON: I wonder if that last observation could be 22 23 repeated? I was distracted while the gentleman was 24 talking, I am sorry. 25 MR WILLIAMS: The point I am making is that unless the 26 26 27 overhead high voltage and subtransmission systems 28 are undergrounded conjointly, there will be very 29 little cost offset on the reliability of major 29 30 outages because it's those particular components of 30 31 the system that cause the major outages. 31 32 32 33 MR WILSON: That is undoubtedly so, Mr Chairman and that 33 34 is covered in our report in some detail. 34 35 36 THE CHAIRMAN: We received a question from a member of 37 the public which I thought I ought put before the 37 38 panel in case any of them want to respond to it. It 38 39 was given to us as an email message yesterday. The 40 question is this: 40 41 42 In view of the fact that the term of this 43 project is envisaged to be over 40 years 43 44 would it not be better to spread the cost 45 across the whole community for the whole 46 period, as the whole of the community will 47 benefit in the end, such as a small 48 percentage increase in electricity charge? 49 From an equity point of view the 50 community, via its normal electricity 51 bills and general revenue, has already 51 52 paid for the undergrounding in some areas, 53 such as town centres and highway 54 upgrading. It is not unfair now for those 55 people to pay for undergrounding in their 56 street where others have had underground 57 power provided at no additional cost in 58 the past. .19/4/02 54 Transcript produced by ComputerReporters

2 I wonder if someone would like to respond to some of 3 the equity aspects? MR WELLSMORE: Yes. I do think a lot of the answers to 6 those questions are actually in the draft report 7 that the Tribunal and the staff have so thoughtfully 8 produced. I suppose at the end of the day the kind 9 of complexities that are built into that is one of 10 the reasons PIAC ended up opting for the approach which says that those communities or those groups of householders or those areas - shopping centre developments, whatever - where people really think 14 undergrounding is the way to go, there's 15 particularly clear benefits, then all right, fine, 16 those people themselves can manage that kind of the cost benefit trade off and manage their own equity in that sort of circumstance. 20 The difficulty is expecting everybody to 21 contribute to the cost. Again, I am not - and 22 neither is PIAC - fundamentally opposed to the idea. 23 For goodness sakes, that is what taxation is all 24 about. The community puts a value on things and 25 says that we have to do them. 27 The problem with a specific service or a 28 specific thing like undergrounding, as has been pointed out, is that people's willingness to pay to some extent depends on their ability to identify their benefit from it, but from a taxation point of view or from a broad community sweep that's not necessarily the most important thing. 35 However, it does get very complex. Some people 36 have paid for undergrounding. Should they pay again? I don't necessarily have a view on that but what is the answer? Some people live in areas where 39 in the last 30 years developers went in and the deal was that everybody paid for the undergrounding and 41 it is factored into rents and those people are 42 paying for undergrounding. 44 I don't have an answer. What is the answer 45 going to be? What are we going to say to those 46 people? If it is going to be a flat rate you're not 47 back to people's willingness but their capacity to 48 pay. It may well indeed be a very, very small 49 amount of money spread across a bill for 40 years; 50 that may be true. 52 Does that amount of money then militate the 53 actual principle of the matter, which is there are 54 some people in the community, many people in the 55 community, who have a very, very different ability 56 or capacity to pay and do we breach this principle 57 and say, "It's for your own good and you've got to 58 have it"?

.19/4/02 55

1 2 I like the idea of having street poles 3 disappearing but you have to pay for that. How do 4 you weigh those things up? As I say, if you're 5 going to do it as a proportional thing, as a 6 proportion of your consumption, unfortunately you're 6 7 back to the same issue. How do you weigh up those 7 8 equity issues? You could see it either way. 8 9 9 10 You might have six people living in a house. 10 11 Because there are six people in the house there is 11 12 more social utility, so should they pay more? If 13 they've got a larger bill should they pay less? I 14 would challenge any of us to come up with the right 15 answer to those things. 16 17 It comes back to a value judgment or in this 17 18 case it will be a political decision and our view 18 19 most certainly, as I've said before, is that for 20 areas of the community that really want this stuff, 20 21 21 that's great. 22 22 MR ZANOTTO: Are you saying this problem can't be solved 23 23 24 and therefore, you're opposed to the undergrounding 25 of cables? 25 26 26 27 MR WELLSMORE: I am not and I've never said I am and 27 28 neither is PIAC. 28 29 29 30 MR ZANOTTO: Do you say the problem is solved? 30 31 31 32 MR WELLSMORE: I am saying the problem can be avoided 32 33 and our option essentially is in line with what the 34 Tribunal is proposing, which is beneficiaries pays; 35 that is, those people who want it pay for it. 36 MR ZANOTTO: This is an all or nothing gain. Either we 37 37 38 do the whole State or we continue with the same 38 policy that is happening at the moment, which is 39 39 40 individual groups in individual areas who want to 40 41 have it get it. 41 42 42 MR WELLSMORE: Then you have a political decision and 43 44 someone - not me fortunately - will have to make a 45 political decision which says either you people will 46 wear the costs or you people won't. 47 47 48 THE CHAIRMAN: A number of people want to get into the 49 discussion. We might take them and come back to 49 50 Jim, if necessary, a bit later on. You have been 50 51 waiting for a while, thank you. 52 53 MS McLEAN: This argument bothers me considerably 54 because I really object to having public money spent 55 on a vast number of things that I think are bad for 55 56 all of us such as some large roads when better 57 public transport would be better. It is a non-issue 58 that you are talking about. Those people, maybe .19/4/02 56 Transcript produced by ComputerReporters

1 they chose to have five children. I chose not to. 2 We all make choices through life. You end up where 3 you are and sometimes because you manage your money 4 better off, those people don't get looked after 5 better. Your arguments are crazy, if I may say so. MS CLOVER MOORE: We are talking about a political decision. We are talking about benefits, and I am not going to repeat them all because we have heard 12 them, but this is the quantifiable and the 13 unquantifiable. I don't believe that you can 14 measure everything in economic terms. There are a 15 whole lot of other values that we have in a 16 civilised society. Peter has already answered it when he said about the issue of road safety, that you don't have to be driving in your own 19 neighbourhood to have a deadly accident in someone else's neighbourhood, so we have to revisit what Peter Downey said earlier. MR BROWN: Robert Brown, I am a councillor with Hornsby 24 Shire Council. I will briefly make a couple of comments and have a couple of quick questions answered. I have waited for sometime to make this comment because I am coming back to the issue of benefits. I have to say that I was somewhat surprised, even shocked, to think that the value that is being placed on the benefits over a 40-year infrastructure project such as this is only \$480m. 33 Maybe the terms of reference have something to 34 do with that because it would appear, I am not a 35 rocket scientist in this area but I have been 36 involved on this issue for some six years. I am not as read as Mr Downey and others in the room, although we certainly have been very supportive in Hornsby and, for those that don't know, we moved the motion at the local government conference last year that was supported across all political spectrums. 43 In terms of quantifiable benefits, unless I 44 have misread something it seems to me that it is 45 generally concentrating on the matter that relates 46 to distribution of the infrastructure only - this is generally. There are issues of collisions, et 48 cetera, but there are a lot of other benefits the community sees. Clover Moore just raised that there are a lot of things you can't measure, that we don't 51 know how to do it, that there are a lot of 52 environmental measures we cannot put values on. 53 That does not mean they don't have value and have 54 considerable value in the minds of the community. 56 I don't know how we do that in terms of what 57 Treasury might be looking for but certainly there 58 are examples in other countries, particularly where .19/4/02 57

1 they have tried to actually do that. I am sure with 2 a bit more work we could come up with something. 3 4 A couple of other issues I don't see anything 5 mentioned about. One is, trying to pay substantial 6 insurance premiums, should I be killed in a car 7 accident or something, and the public liability 8 issue. I thought there would be substantial 9 insurance reductions to the general public. That in 10 itself is a benefit to the community. It may not be 11 a benefit to do with infrastructure issues but 12 certainly I would have thought with the 13 infrastructure issues we are talking about there are 14 considerable expected employment opportunities as a 15 result of such an infrastructure project, the issue 16 of the increase that will create in employment and 17 most, as I understand it - I have been somewhat 18 briefed by Mr Downey - most infrastructures around 19 Australia actually come from Western Sydney from 20 companies that I will not mention. 21 22 In terms of exactly where those employment 23 opportunities will be, I thought the people of 24 Western Sydney would be most stirred up about those 25 opportunities in terms of employment. 26 27 I would like to refer to a recent approach I 28 had from EnergyAustralia. Two days ago they were 29 trying to sign me up for a three-year contract and 30 agree, for doing that, they will reduce my current 31 usage over three years to - there will be a 32 reduction of \$100 approximately for my energy bills 33 over those three years. Like anybody, I would like 34 to save money but, going to the point that was 35 raised earlier, I know there is some criticism has 36 been given to Jim regarding this, I would prefer to 37 pay that \$100 over three years, or even more, if I 38 could be assured that we will be looking at actually 39 getting rid of what not only is an ugly site but a 40 very inefficient system. So if that is what it 41 costs then I am prepared to pay it. 42 43 I don't want to get into social equity issues, 44 we have dealt with those. It is my belief that when 45 the point was made, we don't want to see money taken 46 out of one bucket to pay something else, health, 47 education, the usual issues that are on the front 48 pages every day. No one is suggesting that. The 49 community in my opinion, given my background in 50 local government and being involved on this issue 51 for sometime in the general community, is that 52 people clearly don't want to see that happen. If 53 this is to occur you would expect it would be a 54 substantially large infrastructure project, that it

55 is appropriate, having a national banking background 56 of my own I know there are - comments were raised

57 about a particular bank that might be interested. I

58 am sure there are others that would be particularly

.19/4/02 58

Transcript produced by ComputerReporters

1 interested in getting involved in such an 2 infrastructure. It is not that difficult, I can 3 assure you, and if anyone wants to make money, there 4 is always someone who will make a buck out of 5 something. 7 The questions I have, the community would not 8 agree with seeing money taken out of these other 9 buckets but it would in terms of a benefit, 10 irrespective of whether it can be measured or not, they would be prepared to pay that extra money. 11 12

13 Now my questions relate to Mr Chapman, if he is

14 able to answer them. Would you like to comment in

15 regards to the cost issue per se, how do you see

16 this actually - I have read the report, but can you

17 expand in terms of the actual cost of cabling? I

understand if you take off the telco costing we are 18

looking not at 4.3 but in fact around about 2.4; 19

20 would that be roughly correct?

21 22 MR CHAPMAN: It wasn't my calculation. The costing side 23 of things was calculated by Meritec. If you want to 24 ask guestions about how the total cost was arrived at, you have to go to their replacement, their 25 26 optimisation methodology, and then we have to go to 27 how many households were involved and scale it up by 28

that. I thought you were asking me a question about 29 benefits.

30

6

31 MR BROWN: Yes, I may have written down the wrong note.

32 The second question is to Mr Downey in terms of the

infrastructure, if this project actually gets off 33

the ground, what would your view be about how in 34

35 fact this would be enacted and brought about,

whether by a separate infrastructure body; and if I 36

37 could then leave the last question to Mr Taylor, in

terms of the collection of the levy, Mr Taylor, in 38

39 terms of local government, would you like to expand

40 on just what is going to be involved in terms of the

41 Local Government Act and how councils in their

42 current state of affairs will be able to collect

43 that levy? 44

51

MR DOWNEY: Those people that are here from the 45 46 Department of Energy will have heard me say this 47 before and are probably getting sick of hearing me 48 say it but, honestly, there is only one way to do 49 this, set up one body that is responsible for doing 50 the whole lot.

52 There are various ways you can do that. It

53 could end up owning it at the end of the day or it

54 can be doing it under contract to Integral and EA or

55 to Optus or to Telstra. I believe both Optus and

56 Telstra have said this, that you need one

57 independent body to go ahead and do the work.

58 Whether it is done under contract or whatever, that .19/4/02 59

1 is a detail you can work out later. 2 3 The reason that you do that is that is the only 4 way you will get the real economies, number one. 5 Number two, forget about the rest of the State for a 6 moment, just think about Sydney. I know we will do 7 other areas in the state - you notice I am saying 8 "we are going to do it", not "if". These two 9 gentlemen to my right, if they are let loose, with 10 all due respect, EA and Integral, represent two very 11 large organisations that will be out there competing 12 to buy cable, transformers, with whoever is going to 13 bore the holes, pour the conduit, pull the cable and 14 make the connections, and they will be competing 15 against each other for resources. 16 17 That is the way you drive up the cost. We 18 don't want to drive the cost up, we want to drive it 19 down. That is why you have one body responsible. I 20 am sure that my friend from Optus and my friend from 21 Telstra would expand on that. 22 23 There was another issue earlier and somebody 24 said, yes, but if your property doesn't get done 25 until the 40th year you pay for it all the way 26 along. We produced a publication which some of you 27 will have seen and in the back of that there is a 28 schedule for undergrounding. A lot of what I have 29 said is simplistic because if I go right into the 30 details we will be here all day and I will bore you 31 silly. This is simplistic but it can be worked into 32 the overall scheme. 33 34 The first area you do is main roads and 35 secondary feeder roads in areas adjacent to them. 36 It does not matter that your property is the first 37 to be done or the last to be done after 40 years, 38 you have the benefit of driving down a main road, so 39 a road safety benefit, an environmental benefit, 40 call it whatever you like, and you have that from 41 day one. I can't remember who posed that question, 42 but does that answer it? 43 44 Unless I have not covered all the points, I 45 will leave it at that. 46 47 MR TAYLOR: Western Australia has been doing a fair 48 degree of undergrounding and in that state the 49 finance is provided through the Local Government 50 Association and councils at a rate of 50 per cent. 51 They have a very, very different rating structure 52 and a very different government policy on financing 53 and local government procedures. 54 55 In New South Wales both the opposition and the 56 existing government strongly favour - they are rock 57 solid - rate of pegging legislation. Each year the

58 Government announces the maximum amount by which a .19/4/02 60

Transcript produced by ComputerReporters

1 council may increase its total rate collections and 2 two days ago the next financial year was announced 3 for New South Wales, being 3.3 per cent. With 4 rising costs there is no way that that 3.3 per cent 5 would fund this undergrounding process. 6

7 I note the draft report from IPART has an item 8 suggesting that if the recommended financing 9 structure was for local government financing 80 per 10 cent of the undergrounding, that a refinement to the 11 rating process would need to be established. There 12 would have to be major legislative change and a 13 major departure from existing philosophies. 14

15 Our association, whilst it has not had time to

- 16 consult councils on this, is of the view that it
- 17 should be a state tax and there should be a
- 18 transparent deduction of the avoidable offsets in
- 19 the entire outfit so the total cost on a taxing
- annual basis would be shown and to that would be a 20
- credit for the amount that various authorities would 21
- 22 no longer be requiring to pay out on their existing

23 infrastructure. 24

- MS JUDY ANDERSON: Just responding to the issue about 25
- 26 having one infrastructure provider, it has been
- 27 discussed a fair bit and I am sure Telstra has a
- 28 similar view to us. Basically the reason why Optus
- 29 is here is because the Federal Government has a
- policy for broad-based infrastructure competition 30
- 31 and Optus installed its cable network so it could
- 32 compete head-to-head with Telstra. If basically we
- were forced to pay at the end of the day, we would 33
- 34 exit the industry potentially and there would only
- 35 be one infrastructure provider left. You would see
- 36 no competition in the market. 37
- 38 If there was a single infrastructure provider
- 39 that was independent to us, that would reduce the
- 40 level of competition and the effect of that is it
- 41 means at the end of the day the services that come
- 42 out of that cable will be limited because you will
- 43 have one piece of infrastructure that provides a
- 44 certain range of services, Telstra and Optus won't
- 45 have the flexibility to design our services to meet
- 46 what we feel are our customer needs and competition
- 47 will be reduced. I am not sure that answers the
- 48 answer either. 49
- 50 MS CLOVER MOORE: Can I just say, I don't see how the

51 community has really benefited from having Optus. I

- 52 understand Optus has benefited, but I don't really
- 53 think that is a very important consideration for
- 54 IPART when we are looking at something that is a
- 55 community benefit.
- 56

MR CLARKE: Laurie Clarke, Telstra. I think the issue 57 58 with a single provider, the key issue, is about .19/4/02 61

1 coordination and planning so we can keep the costs 2 down. Whether a particular party owns it or not is 3 a debate we can have and spend many hours on and the 4 impact on competition, but the key issue is we need 5 a coordinated and planned approached that involves 5 6 all of the parties from the initial stages. 7 MR BEWLEY: I wanted to know, first, two propositions: 8 9 How long the present committee will be sitting for 10 before it finishes its present duty? Does that 11 finish with the report? 12 13 MR COX: IPART will finish its report, give it to the 14 Government, and the consideration of the report is a 15 matter for government. 16 16 17 MR BEWLEY: Is that the committee which is being --17 18 18 19 19 MR COX: We are nothing to do with the steering 20 committee. We have no link with them. 21 22 MR BEWLEY: The steering committee --22 23 23 MR COX: -- is a government body. We are independent of 24 25 government. We will do a report and give it to the 26 Government. 27 27 28 MR BEWLEY: The second question, what I really wanted to 29 know is, what is next? After you have submitted 29 30 your report, and picking up particularly on comments 30 31 from Clover and others, implementation, what is 32 next; and what type of public consultation might be 33 coming out of the recommendations of the IPART 33 34 report for how that implementation begins and how 35 the community is kept involved? I certainly would 36 think that the community would be interested in that 37 aspect more so than the important need to have 37 38 better representation on the committee alone, so 39 there is more than just putting the right balance on 40 the committee, it is having continuing public 40 41 consultation on the public's needs and how that 41 42 might be done and how regular. 42 43 43 MR COX: I understand the issues. They are matter for 44 45 government rather than IPART. 46 46 47 MS CLOVER MOORE: Should that question go to Mr Yeadon's 47 48 representative. 48 49 MR STEFFEN: Certainly the steering committee, the 50 50 51 inter-government steering committee, has a 52 requirement to report to Minister Yeadon and that 53 will come after the IPART report. We are here today 54 observing and listening. There is public 54 55 consultation through the IPART website and when this 56 review was announced the department's website was 57 also advertised. We have received lots of 58 submissions there, lots of them, that there were .19/4/02 62

Transcript produced by ComputerReporters

1 guite a few people who weren't prepared to pay and 2 people who were already underground and not prepared 3 to pay, so we have got lots of arguments, both sides 4 of the coin. 6 All of that will be taken into account in the 7 report to the Minister, to the Premier and then to 8 cabinet. If cabinet decides on further 9 consultation, that is its call. If they ask the 10 Minister to do it, he will continue the 11 consultation, but we have certainly spoken to lots 12 of people, with Peter and with Professor Ray 13 Stirling on trenchless technology. The consultation 14 has been happening as we go along. It is no use us 15 doing a report out of our heads, presenting it publicly, then having consultation. It has been all the way along. THE CHAIRMAN: We would like to start winding up soon. 20 Perhaps we could have a couple of final questions -21 one at the back and one over there. MR VINEY: This relates to a comment from both Optus and 24 Telstra. When fibre optics was being rolled out 25 there was an argument that Telstra could have taken 26 the role of a common carrier and had everybody's program content going down there. There was the 28 capacity and the new technology was making more and more capacity available. We had two systems being rolled out to suit the partners of Telstra, with Fox 31 and others, and so now we don't have a common 32 carrier 34 In regard to electricity, I could have five 35 different suppliers coming down the one set of 36 wires. The same applies to the gas that comes to my place. I have five different suppliers of gas. 38 There are other carriers available by legislation. 39 That has not been imposed by Telstra. THE CHAIRMAN: There is a comment over here. MR BROWN: Thank you, Mr Chairman. I have finally 44 worked out what I wrote down earlier. My apologies 45 to Mr Chapman. Could I clarify some points raised earlier, particularly by the gentleman down here, concerning suggestions about what we may see as the future in terms of the steering committee and what 49 the Government should be doing. 51 Am I to understand that you in fact report that 52 back as a suggestion or are you saying that it's not 53 for you to consider? 55 THE CHAIRMAN: I think it is a matter for the 56 representatives of the Government to take forward 57 the views expressed here to the Government and 58 indicate what they were. .19/4/02 63 Transcript produced by ComputerReporters

1 2 MR BROWN: It won't be part of your final report? 3 THE CHAIRMAN: No. 4 5 MR BEWLEY: It will be in the comments. 6 7 MR BROWN: That was my next question. Where would we 8 9 record it? This is a public hearing. 10 THE CHAIRMAN: We would be willing to make the 11 12 transcript available, if there are no objections to 13 that course. 14 15 MR BROWN: It should be made available somewhere. My 16 question is - and I didn't mean to make a big issue 17 about it but I thought it was worth clarifying and 18 Mr Chapman, I apologise - irrespective of whether it 19 is 4.3 or 4.4 to actually run with this project, do 20 you have a feeling for what they would have to 21 borrow or what would have to be made available in 22 terms of funds initially to kick this off? 23 24 Obviously, we won't be going and borrowing 25 \$4.3 billion or finding \$4.3 billion in Treasury's 26 coffers. What do you see as the actual amount? 27 28 MR CHAPMAN: We were asked to look at funding options, 29 not financing options and these are often confused 30 in the public's mind. The question you're asking 31 now is really a financing question, not a funding 32 question. 33 34 Financing goes to the matter of who is going to 35 raise loans, if loans are appropriate. If this fell 36 back on the DNSPs then that would become a financing 37 question for them. The funding question is quite a 38 separate issue. Can I point you back to the Terms 39 of Reference. We were not asked to address 40 financing 41 MR BROWN: In light of the answer that was just given -42 43 and I thank you, Mr Chapman - I would like simply to 44 make the point that too often we're seeing out in 45 the public arena at the moment the comment that it 46 is this big, awesome amount of money and therefore, 47 the public won't accept it. 48 49 The actual amount of money - from whatever 50 source it is raised, in terms of infrastructure 51 loans or however it is done - is nowhere near 52 \$4.3 billion or even \$2.4 billion; it is a far 53 lesser amount. I haven't done the sums here, maybe 54 somebody has done some preliminary estimation, but 55 it is nowhere near that figure. 56 57 Unfortunately, at the moment the press in 58 particular paints a very dark picture about what the .19/4/02 64 Transcript produced by ComputerReporters

1 actual cost is. Everyone thinks, "Oh, my God, I'm going to have to pay \$5,000", like it's going to 2 3 happen now or the Government is going to have to 4 raise \$4.3 billion, like they're going to have to do 5 it now. That is not the case at all. 6 7 If there was some way of actually, shall we 8 say, clarifying that issue and placing it in the 9 public arena, I think it would be worthwhile, once 10 this project goes forward. 11 12 MR CHAPMAN: I can appreciate your difficulties. It is 13 often very hard to bring things back to one number, 14 which is required. When doing a cost benefit 15 analysis you have to discount all the future 16 benefits, discount all the future costs and try and 17 present them as one number. 18 19 It becomes very confusing when people start 20 asking, "But what has to be borrowed or financed in 21 the first instance? What has to be laid out in the 22 first year?" A single number can't answer those 23 kinds of questions. 24 25 It is difficult for reports like this to ever 26 make that completely transparent but we can have a 27 go at improving that aspect of clarity in the final 28 report. 29 30 MS MOORE: You talked about improved public safety. 31 Does that include the State Emergency Services workers and if it doesn't could they be specifically 32 included, because every time they go out after a 33 34 storm their lives are put at great risk; and could 35 you also include employment opportunities as a very 36 important benefit. 37 38 MR BEWLEY: Also, when SES workers go out on calls they 39 are sacrificing their job opportunities at that time 40 and that is a cost which I think is measurable. 41 THE CHAIRMAN: Thank you. We will note those matters. 42 43 What I would like to do now is give the members of 44 the panel the chance to make any final comments they 45 might wish to and then we'll ask Ross and Jeffrey to 46 respond, to the extent that they wish to do that and 47 then we will wrap things up. We might start with 48 David. 49 50 MR NEVILLE: In conclusion, Integral would like to 51 restate its support for an undergrounding program. 52 Clearly, what has come out of this forum is that the 53 funding issue needs to be resolved, so that is a 54 critical issue that we need to work on. 55 56 We would also like to restate our support for 57 the use of pilot programs and the willingness-to-pay 58 study as a mean of testing community support for .19/4/02 65

1 future undergrounding. Thank you.

- 2
- MR WELLSMORE: From PIAC's point of view I say again 3
- 4 that we are not opposed to the idea of
- 5 undergrounding and we welcome the Tribunal's draft
- 6 proposal. As we said in our written submission to
- 7 the Tribunal, we think that pilots and so forth
- 8 would be a good way to explore some of the other
- 9 issues that have been raised today. I thank David
- 10 for reminding me about that.
- 11
- 12 MR JAMIESON: I would again like to thank the Tribunal
- 13 for giving us the opportunity of participating in
- 14 this debate and I expect that there will be a number
- 15 of issues still to be discussed in the future,
- 16 particularly on the detail of the costing
- 17 methodologies, et cetera, where there are some 18 misunderstandings in certain areas, we believe, on a
- 19 number of fronts. We will talk to the Tribunal a
- 20 bit more about that. Overall, we support the
- 21 project to do undergrounding and support the
- 22 beneficiaries pays approach. Thank you very much.
- 23
- 24 MR DOWNEY: First of all, I would like to correct
- 25 something that I said earlier because I believe it
- 26 came out the wrong way. When I raised the
- 27 possibility of the company or the organisation which
- 28 ends up putting the cable underground owning the
- 29 cable, that wasn't directed at Telstra or Optus.
- 30 That is water under the bridge, unfortunately,
- 31 whether you like it or not and can't be wound back. 32
- 33 I can only reiterate some of the things that
- 34 I've said earlier. It doesn't matter a damn what
- 35 Peter Downey wants and it doesn't matter a damn what
- 36 Sydney Cables Down Under wants, it's what you want,
- 37 that's what matters; it's what you want. You have
- 38 to get that message over to the Government. 39
- 40 You have obviously been getting it over to me
- 41 because I'm not in the habit of belting my head
- 42 against a brick wall. You have obviously got it
- 43 over to me and you've obviously got it over to my
- 44 organisation but you need to get it over to the
- 45 Government.
- 46
- 47 The other point that I would like to make is
- 48 that really this is something that will benefit
- 49 everyone. One thing that has been overlooked here
- 50 is that if a storm comes along and blows down the
- 51 power lines or the phone or the pay TV cable, who
- 52 pays for it? The whole community pays for it, not
- 53 those living in Hornsby because it was blown down
- 54 there, or those in Sutherland or Blacktown or
- 55 wherever else it happened.
- 56
- 57 It is spread across the whole community, so the
- 58 whole community will benefit, the whole community
- .19/4/02 66
  - Transcript produced by ComputerReporters

- 1 will be winners from any undergrounding. We have to
  - 2 find out a way to embrace the whole community and
  - 3 bring the whole community into it. We have to give
  - 4 them a reason why they want to opt in and not opt 5 out.
  - 6
  - 7 That is going to take leadership and
  - 8 unfortunately that's not something that this forum
- 9 is about; that is for our politicians. It will take
- 10 leadership and it will take vision. I spoke earlier
- about a dream. Martin Luther King had a dream. Why 11
- 12 can't we have a dream? What we're really seeking
- here is a program which is inclusive and includes 13
- 14 everyone, that pulls them in, that makes them part
- 15 of the same dream. We are not looking for an
- 16 exclusive program for the people in Hornsby or
- 17 Wahroonga or Ku-ring-gai or any of those areas.
- 18 What we need is an inclusive program, not an
- exclusive program. Thank you. 19
- 20
- 21 MR TAYLOR: Thank you. The associations do believe the
- 22 funding process needs a complete shakeup, a complete
- 23 revision of what has been suggested. We strongly
- 24 recommend that pilot underground examples be
- 25 undertaken. There are a number of projects already
- 26 that I'm aware of which have a degree of funding
- 27 from councils and I believe they are capable of
- implementation at a fairly early stage. That should 28
- be done so that all our discussions about costs -29
- 30 hidden costs, overheads, underheads, all the rest of
- 31 it - should be sorted out from observance of
- 32 performance in the undergrounding process. 33
- 34 I don't believe the steering committee will dry
- 35 up in the middle of June when the Premier makes his
- 36
- statement about where we go from here. I believe
- 37 the steering committee will continue in its present 38
- form, or some other form, and I would certainly
- 39 believe the steering committee should include local 40
- government representation. 41

46

47

48

49

50

51

52

53

55

.19/4/02 67

- 42 There are still many technical issues in the
- 43 background. I referred earlier to trees and to
- street lighting. There are many issues associated 44
- with those which probably haven't been raised yet. 45

difficult issue; it's not easy. We think, however,

in making its decision because there will be

undergrounding cables and those will have a

56 Finally, Optus's view is that we're more than

57 happy to continue talking about this issue so as to

Transcript produced by ComputerReporters

58 find a resolution and we'll work with the New South

54 financial impact on providers.

that IPART has taken a sensible approach to this

problem. We think the Government should be careful

implications beyond the immediate implications of

MS ANDERSON: Optus's view is basically that this is a

1 Wales Government in helping them to do that. Thank 2 you. 3 THE CHAIRMAN: Jeffrey and Ross, do you have any final 4 5 thoughts? 6 7 MR WILSON: Mr Chairman, firstly, I would like to thank 8 all the contributors who have offered thoughts 9 today. It has been a very interesting session. Our 10 object was to listen to what you all had to say and 11 I've noted several points that we will look at 12 carefully and some areas where we might make some 13 modifications to the report. 14 15 Could I be permitted to make a personal 16 observation, Mr Chairman? I would say that the 17 group here has a good grasp of the issues and the 18 various concepts. I think you will recognise, as we 19 do, that some of the various points and ways of 20 going about this work are mutually at odds with some 21 other possibilities and that is the difficulty in 22 our work. 23 24 What we'll attempt to do is give all the 25 various prospects even consideration and put forward 26 a balanced view. I would like to thank everybody 27 for the contributions they've made. This exercise 28 has been very helpful to me. 29 MR CHAPMAN: I would like to endorse those observations. 30 31 I have been gratified to see how people have 32 appreciated how difficult it is to come to grips 33 with quantification issues, especially on the 34 benefits side of things. I detect I think a broad 35 appreciation across the audience of those kinds of 36 difficulties. 37 38 We have gained some insights today and we might 39 need to clarify some of the things we have said. We 40 have some suggestions about things that may have 41 been left out that we need to give emphasis to and 42 we're grateful to you for that. 43 THE CHAIRMAN: It remains for me to close the session. 44 45 Could I perhaps remind you of a couple of dates. We 46 would like to get further submissions from you by 47 26 April, which is Friday of next week. I apologise 48 for the short timeframe but we're required to report 49 to the Minister by 10 May. 50 51 As we have stressed throughout the session, we 52 are just one part of the Government's consideration 53 on the issue of undergrounding cables. Our task 54 involves us considering what has been said here, 55 looking at the report and revising the report, but 56 it is then for the Government to take the project 57 forward. I am sure the Government will be 58 interested in the views expressed today. .19/4/02 68 Transcript produced by ComputerReporters

2 It remains for me to thank Jeffrey Wilson and 3 Ross Chapman for their presentations today, the 4 panelists for their interesting and stimulating 5 contributions and you for coming along, being 6 interested in our work and helping us to the extent 7 you have. With that note of thanks I would like to 8 close the session and we will proceed to consider 9 what we need to do with our report. Thank you very 10 much.

12 (At 1.26pm the Forum was adjourned accordingly)

13 14

11

1

15 16

19

20 21

22

23

24

25

26

27

28

29

30

31

- 17 18

- 32
- 33 34
- 35 36
- 37 38
- 39 40
- 41 42
- 43 44

45

46

- 47 48
- 49 50
- 51
- 52
- 54
- 55
- 58

19/4/02 69

Transcript produced by ComputerReporters

53

56

57