



**1. DISCUSSIONS WITH MR ALAN HOPKINS, REGIONAL MANAGER, ENERGY AUSTRALIA RE:  
Undergrounding of Cables and the Funding Formula.**

Alan provided a brief review of;

**Undergrounding Electrical Infrastructure**

- The Electricity Network
- The Regulatory Regime
- Undergrounding policy principles
- A comparison of costs between undergrounding and other infrastructure improvement strategies
- Opportunities
- Council's responsibilities for Undergrounding Projects

**The Regulatory Regime**

- The Independent Pricing and Regulatory Tribunal (IPART) determines EnergyAustralia's Approved Capital and Operating Expenditure over 5 years
- EA has to justify expenditure to approved plan – rigorous auditing/records
- The 2002 IPART report "Electricity Undergrounding" – IPART did not allow undergrounding costs to be recovered through regulated tariffs – based on equity
- IPART determination on Capital Contributions requires splitting of construction costs
  - Upstream Augmentation – benefits many other customers – paid by EA through tariffs
  - Connection Costs i.e. direct connection costs paid by customer
- NSW Government has introduced Network licence conditions for minimum design standards (usually N -1) and minimum average feeder reliability standards
- NSW Government has also introduced guaranteed customer reliability standards
- IPART now accepts costs associated with improvement of reliability of supply to customers to meet standards

**General Undergrounding Principles**

- It would cost about \$7 billion, to underground EnergyAustralia's 23,000 km of overhead powerlines - and approximately half the poles would still need to be retained for street lights
- Savings are negligible compared with the cost of burying the lines.
- New construction in urban green field sites supplied underground
- We often underground powerlines where it will significantly improve the local electricity supply to an acceptable standard i.e. improve reliability
- Existing high voltage overhead lines are undergrounded rather than low voltage, to improve supply for thousands of customers rather than the smaller number of customers who would benefit from low voltage mains
- We often underground powerlines to provide increased capacity i.e. augmentation
- EnergyAustralia is willing to implement local undergrounding schemes on a case-by-case providing stakeholders contribute to costs
- EnergyAustralia would normally contribute an amount equal to the net present value of maintenance and refurbishment costs avoided because of the undergrounding. The remainder of the cost is to be met by council and affected residents.
- Council DA conditions for large commercial developments often require undergrounding of surrounding overhead lines – issues for other customer's services – more poles may be required close to them
- Technically very difficult and costly to underground Subtransmission lines eg 132,000, 66,000 and 330,000 volt lines – keep in mind when contemplating DA conditions requiring undergrounding of overhead lines around development – some could be subtransmission lines.

### Comparative Costs

Options	Indicative Costs	Comments
Trimming if overhead wires are maintained	\$15 - \$200 per span per annum	Most economic short term outcome provided environmental issues are managed
Replacement with Aerial Bundled Cables (ABC)	\$2,000 - \$6,000 per span plus reduced trimming costs (higher end due to access, restricted working hours – eg main roads)	EnergyAustralia provides a heavily subsidised program with councils contributing 50% per span for all agreed projects. Reduced trimming will still be required
Replacing overhead lines with underground cables	\$56,000 - \$80,000 per span. (Typically 8 customers per span at \$7,000 - \$10,000 per customer –doesn't include services – <b>significant issue</b> )	Costs may vary significantly from location to location
Relocating powerlines to avoid vegetation	Need to be costed on a case by case basis. Could be done on a 'beneficiary pays' basis	Each job is unique. Costs need to be assessed on a range of issues - technical, social and environmental

### Recent Undergrounding Projects

The following undergrounding costs are taken from recent undergrounding jobs undertaken by EnergyAustralia (no rock).

LV Undergrounding Estimate - Commercial/Beachfront		
Cable Laying		} \$203,873.22
Overhead		
Street Lighting		
Underground		
	<b>Total (7 spans)</b>	<b>\$203,873.22</b>
	<b>Average per span</b>	<b>\$29,124.75</b>
Services	Underground 9 services	\$78,819.50
	<b>Total (9 services)</b>	<b>\$78,819.50</b>
	<b>Average per service</b>	<b>\$8,757.72</b>

HV/LV Undergrounding Estimate - Residential - 3 spans		
Cable Laying		\$96,892.14
Overhead		\$53,000.00
Street Lighting	Recover/transfer exist 4 SL brackets Erect 2 new SL columns	\$7,374.00
Underground		\$12,522.00
	<b>Total (3 spans)</b>	<b>\$170,000.00</b>
	<b>Average per span</b>	<b>\$57,000.00</b>
Assumptions	Relocation of services not included	
	Road crossings to accommodate services not included	
	50m span length	
	One spare conduit installed	
	Excavation of concrete footway/driveways	
	No rock excavation	





1. That the above climate change actions be endorsed for action by NSROC and the NSROC Environment POG.
2. That a vote of thanks be given to the NSROC Environment POG for the work undertaken.

**5. METROPOLITAN STRATEGY**

665/07 **RESOLVED:** Moved: Clr I Longbottom                      Seconded: Clr N Ebbeck                      **CARRIED**  
That the Report be received and noted.

**6. NSROC SUB REGIONAL PLANNING STRATEGY**

General discussion regarding the strategy, and the need to ensure, that the positive role of the Macquarie Park Corridor is reflected in the strategy document.

666/07 **RESOLVED:** Moved: Clr I Longbottom                      Seconded: Clr I Petch                      **CARRIED**  
1) That the NSROC Board delegates the adoption of the Northern Sydney Sub-Regional Planning Strategy subject to the amendments supplied by Ryde Council;  
2) That the Executive Director prepares a media release for the President identifying the key features of the Northern Sydney Sub-Regional Planning Strategy;  
3) Copies of the Sub-Regional Strategy be provided to the Department of Planning and relevant state members; and  
4) The council planners involved in the preparation of the strategy are commended for their efforts.

**7. STRENGTHENING LOCAL GOVERNMENT TASKFORCE**

The *Strengthening Local Government Task Force* has been formed to respond to the 49 recommendations in the Local Government Inquiry.

General discussion;

- First Edition of the *Strengthening Local Government Task Force News* tabled for members information.
- The need to lobby strongly for direct funding from Federal Government.
- Local Government Cost Shifting Survey – LGSA will undertake the Survey through a representative sample of councils using the methodology of the Allan Report. The first of the surveys will begin in May with a report due by September.

667/07 **RESOLVED:** Moved: Clr I Longbottom                      Seconded: Clr I Petch                      **CARRIED**  
1. That the Report be received and noted.  
2. That NSROC request the LGSA to provide a regional workshop on the Task Force's process and findings at a later date.  
3. That Clr Genia McCaffery and the LGSA be thanked for the work undertaken by the '*Strengthening Local Government Task Force*'.

**8. SN2030 'PACIFIC TECHNOLOGY CORRIDOR' PROPOSAL**

668/07 **RESOLVED:** Moved: Clr G McCaffery                      Seconded: Clr N Ebbeck                      **CARRIED**  
That the Report be received and noted.

**9. PRODUCTIVITY COMMISSION STUDY ON LOCAL GOVERNMENT REVENUE RAISING.**

669/07 **RESOLVED:** Moved: Clr G McCaffery                      Seconded: Clr I Petch                      **CARRIED**  
That the Report be received and noted.

**10. ALGA COMMUNITY INFRASTRUCTURE IDEAS REGISTER**

670/07 **RESOLVED:** Moved: Clr I Longbottom                      Seconded: Clr S Hoopmann                      **CARRIED**  
That the Report be received and noted.

## **11. GENERAL BUSINESS**

### 11.1 Area Health

Clr I Longbottom raised the issue that the Northern Area Health is not aware of what Councils do – and the need to form a closer relationship.

- NSROC Executive Director advised –
  - That an invitation had been extended and accepted by the Department of Health to attend the NSROC Community Services Group Meetings.
  - That the NSROC Community Services Group are undertaking an audit of services provided by Council, and when completed could be provided to the Area Health.

671/07 **RESOLVED:** Moved: Clr I Longbottom                      Seconded: Clr G McCaffery **CARRIED**  
That NSROC develop a closer working relationship with the Department of Health.

### 11.2 Proposed Amendments to Advertising Regulations

Clr F Findlay raised concerns regarding the amendments to Advertising Regulations proposed by State Government, and that Councils have until the 16<sup>th</sup> May for comments to be lodged and urges all Councils to make submissions.

### 11.3 Indian Myrna Birds

Clr I Petch raised concerns regarding the nuisance of Indian Myrna Birds and sought a regional approach to their eradication.

- The Executive Director advised members that Councils are members of the Northern Sydney 'Urban Feral Action Group' where these concerns have already been raised, and that currently Councils are trialling specific cage traps designed for controlling this pest species.

### 11.4 Commencement time of NSROC Board Meetings

Clr N Ebbeck raised the issue of commencement time for the Board Meetings and asked that they be brought forward to commence at 6.00 p.m. instead of 7.00 p.m.

672/07 **RESOLVED:** Moved: Clr N Ebbeck                      Seconded: Clr G McCaffery **CARRIED**  
That the NSROC Board meetings now to commence at 6.00 p.m. and to take effect from the next meeting.

### 11.5 Contract of Employment – Executive Director.

Report tabled at the meeting for members consideration.

673/07 **RESOLVED:** Moved: Clr I Petch                      Seconded: Clr G McCaffery **CARRIED**

1. That the Board reappoints Mr Dominic Johnson to the position of Executive Director for a period of five-years.
2. That the Basic Remuneration Package at the commencement of the contract is \$126,039.00.
3. That the Executive Director be thanked for the excellent work undertaken to date.

## **12. HOST COUNCIL**

674/07 Delegates expressed appreciation to Hornsby Council for their generous hospitality in hosting the 119<sup>th</sup> Ordinary Meeting of NSROC.

**The meeting concluded at 9.35**

**The next meeting No. 120  
Will be held on  
THURSDAY 16<sup>TH</sup> AUGUST 2007  
AT RYDE COUNCIL  
COMMENCING AT 7.00 PM**