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Dear Mr Roberts

#### DRAFT DECISION ON TRANSGRID'S NETWORK REVENUE CAP

Macquarie Generation would like to make a formal submission to the ACCC's draft decision on TransGrid's Network Revenue Cap in support of the comments made by Russell Skelton at the ACCC's public forum on 18th June 2004. Our comments are confined to the proposed allowance for TransGrid's operating and maintenance expenditure over the next five year revenue determination.

Macquarie Generation fully understands the ACCC's obligation to ensure that regulated revenue targets are based on reasonable assumptions and forecasts. We are also acutely aware that the transmission network infrastructure provides the platform for competition amongst generators throughout the National Electricity Market. Overly conservative allowances for operating and maintenance expenditure will affect the performance of the wholesale market if the timing of network outages is not responsive to likely market impacts. Customers may ultimately pay more for electricity if the regulator does not provide sufficient flexibility for the monopoly network provider to plan and reschedule major outage work.

The ACCC draft decision provides almost \$90 million less for operating and maintenance expenditure over the five years to 30th June 2009 than that sought by TransGrid in its initial application. The ACCC has imposed a 2% compounding efficiency factor meaning that TransGrid only derives financial benefit from any efficiency gain in excess of this amount.

Macquarie Generation operates two power stations, Bayswater (2,800 MW) and Liddell (2,080 MW), located near Muswellbrook in the Hunter Region. The Corporation relies on TransGrid's transmission network to deliver our electricity to the main markets in Newcastle, Sydney and Wollongong. In total, there are almost 1,500 kilometres of 330 kV transmission assets on six lines along three corridors that transport our output to these load centres. All electricity flowing south along the Queensland – New South Wales interconnector to these load centres must use the same transmission infrastructure. We also compete directly with Delta Electricity and Redbank for access to parts of this network.

Macquarie Generation is concerned that reductions in TransGrid's operating and maintenance expenditure will extend the duration of network outages and create large costs for the market and potential commercial impacts for individual participants.

### **Risks of constraining TransGrid’s operating expenditure**

We have prepared a case study to demonstrate the possible cost and market trade-offs associated with scheduling line outages. It involves the transmission line between Liddell and Newcastle (TL81) and an actual market event that occurred on 9th March 2004 when TransGrid undertook maintenance work on that line.

#### *Assumptions*

- An outage on TL81 constrains output from Macquarie Generation and Delta Electricity by 1,200MW;
- TransGrid could undertake the outage over a period of 13 weekdays at a labour cost of \$15,650 or it could perform the work over eight weekend workdays using 12 hour shifts at a labour cost of \$51,200;
- The case study uses actual wholesale prices during March 2004.

#### *Scenario 1 Outage causes 5% increase in spot prices*

A conservative estimate of the market impact of an outage on TL81 is an increase in spot prices of 5% if the outage occurred during the summer or winter months. A similar effect may also occur if there were multiple plant outages scheduled for the off-season periods.

#### *Scenario 2 TransGrid outage causes 9th March 2004 spot prices*

NEMMCO day ahead forecast of demand was particularly high for 9th March 2004 driven by expected high temperatures. The outage on TL81 reduced available generation and was associated with a very tight market before and after the outage. The average spot price for the day was \$1,293.

#### *Market impacts*

Under scenario 1, the additional labour costs associated with weekend maintenance work of \$35,550 are offset by the \$1 million reduction in pool price payments by market customers. The result is driven by the lower actual weekend spot prices relative to the typical working weekday spot prices.

Under scenario 2, the move to a weekend outage schedule reduces pool payments by more than \$138 million for an increment in labour costs of \$35,550. This scenario assumes that the weekend price for March would be 5% higher on average and the spot price for 9th March 2004 in the absence of the outage would have been the average working weekday price for March 2004.

<i>Outage duration</i>	<i>Scenario 1</i>	<i>Scenario 2</i>
13 weekdays	\$2.7M	\$140M
8 weekend workdays	\$1.7M	\$1.7M

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Scenario 2 provides an extreme example of the possible financial impacts for participants of poorly timed maintenance work, although such redistributions will occur from time to time if TransGrid does not have the resources and the incentives to take account of market outcomes. Scenario 1 is a more realistic example of the financial impacts on market participants that occur on a regular basis.

The estimates in the above scenarios are predominately transfers amongst market participants as a consequence of altered spot price outcomes. However, such outcomes will inevitably create efficiency costs for the market:

- Whenever the system operator constrains the dispatch of particular generators to manage network outages it is likely that relatively high cost generators will be dispatched ahead of low cost generators such as Macquarie Generation. In this case, output is sufficient to meet demand across the system but overall fuel and plant operating costs are greater than they would have been in the absence of the constraint.
- Network outages that limit generator access to the transmission system will create additional transaction costs and risk premiums in the market. Customers will ultimately pay for any unnecessary price excursions and the additional price risks that existing retailers and generators have to manage.
- Unpredictable network outages create additional uncertainty for generators as to whether they can access the network, earn the regional reference price and meet all contract obligations. This uncertainty adds to the risks of investing in new generation capacity.

### **Achievable reductions in operating expenditure**

The ACCC has chosen a 2% efficiency adjustment factor to represent expected productivity improvement for TransGrid. By its nature, the regulated determination process involves a degree of subjectivity in the setting of various parameters. Macquarie Generation believes that the proposed efficiency target would require significant cost cutting and even less responsive maintenance practices with no commensurate benefit for market customers.

Macquarie Generation has a commercial incentive to increase its revenue through volume and/or price changes while reducing per unit costs of output. As a market participant we retain any saving in operating and maintenance expenditure. Since 1997 our labour force has reduced by 200 people to just over 600 staff. We have achieved substantial gains in our technical efficiency but those productive improvements cannot continue indefinitely. Labour accounts for approximately 35% of operating expenditure excluding fuel. With labour numbers at stable, efficient levels combined with labour costs increasing above general inflation, it is difficult to achieve substantial ongoing reductions in operating expenditure.

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TransGrid may face similar pressures in containing costs because of the labour intensive nature of its operating and maintenance work. Macquarie Generation believes that the Commission should conduct a more rigorous analysis of the scope for compounding expenditure savings rather than relying on arbitrary efficiency factors from previous revenue determinations.

### **TNSP performance incentives**

The Ministerial Council on Energy has stated that there “would be valuable customer and investor benefits in more closely aligning transmission performance measures with their market impact”. The Council has asked the ACCC to develop a performance incentive regime that takes account of the actual cost of constraints. Macquarie Generation strongly supports this concept and looks forward to reviewing the proposed performance mechanism.

However, no performance incentive regime will deliver exact signals to TNSPs to drive market responsive practices in all circumstances. The ACCC must be careful not to create a complex model that few participants can understand. On the other hand, an overly simplistic model may create unintended outcomes if the TNSPs focus only on those activities that affect penalties or rewards. We believe that the ACCC must complement the performance incentives with an adequate revenue target for operating expenditures particularly during the early stages of any new incentive regime.

### **Summary**

Macquarie Generation encourages the Commission to look at the TransGrid decision in the wider context of the market impacts of TransGrid’s network development and maintenance activities. The Commission needs to establish a proper balance between driving down TransGrid’s costs and the value that the network can deliver if TransGrid has the resources and incentives to improve the planning and scheduling of its work. Customers ultimately pay for both monopoly transmission charges and the costs of constraints caused by poorly timed maintenance. We believe that the potential savings from better planning far outweigh the expenditure reductions outlined in the ACCC’s draft decision. The introduction of an effective TNSP performance regime will play an important role in driving these benefits.

Yours faithfully

Signed: G V Every-Burns

G V EVERY-BURNS  
CHIEF EXECUTIVE  
AND MANAGING DIRECTOR

29th June 2004

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